MAPPING THE ELEMENTS OF GOVERNANCE IN INTERNATIONAL HEALTH SECURITY

by

SHWETA GOPALAKRISHNAN

B.S., University of Mumbai, 2006 M.S., University of Mumbai, 2008

A THESIS

submitted in partial fulfillment of the requirements for the degree

MASTER OF PUBLIC HEALTH

Department of Diagnostic Medicine/Pathobiology

College of Veterinary Medicine

KANSAS STATE UNIVERSITY Manhattan, Kansas

2011

Approved by:

Major Professor Dr. Justin Kastner

Abstract

Globalization has resulted in closer integration of economies and societies. It has contributed to the emergence of a new world order which involves a vast nexus of global and regional institutions, surrounded by transnational corporations, and non-governmental agencies seeking to influence the agenda and direction of international public policy. Health is a center point of geopolitics, security, trade, and foreign policy. Expansion in the territory of health and an increase in the number of health actors have profound implications for global health governance. Accordingly, the focus of the thesis is on endorsing the three core elements of governance proposed by Ackleson and Lapid, which comprises a system of (formal and informal) political coordination—across multiple levels from the local to the global—among public agencies and private corporations seeking to accomplish common goals and resolve problems through collective action. This shift in global governance has been prominent in the health sector with the formation of numerous public-private partnerships, coalitions, networks, and informal collaborations. In an effort to cope with the proliferation of players in the health sector, the World Health Organization has undergone gradual transformation in its governance framework. It is important to examine the evolution of the governance architecture of the WHO, as well as its effective application in the current global environment maintaining the organization's legitimacy. This study tries to offer a comprehensive account of the WHO's history, its successes and failures, as well as challenges and opportunities confronting the organization. Embracing public-private partnerships and formal-informal interactions does not simply fill governance gaps opened by globalization, but helps cluster in narrower areas of cooperation, where the strategic interests of multilateral organizations (e.g., the WHO), states, and transnational actors intersect. Global health problems require global solutions, and neither public nor private organizations can solve these issues on their own. The forms of governance based on the Acklesonian-Lapidian definition assist in accomplishing public health goals through shared decision-making and risk taking.

Table of Contents

List of Figures	V
List of Tables	vi
List of Abbreviations	vii
Acknowledgements	ix
Chapter 1 - Introduction	1
Introduction	1
History of international health security	3
Globalization and governance	6
Research questions, objectives, and methodologies	14
World Health Organization	16
Initiatives	17
Chapter 2 - The Concept of Governance	21
Making sense of global governance	21
Definition of governance	23
Shift in governance structures in global public health	27
Significance of governance in global public health	30
Conclusion	36
Chapter 3 - History of international cooperation in public health and the role of governance	38
The pre-WHO era	38
History and creation of the WHO	42
Structure of the WHO: Identification of the elements of governance	46
The role of NGOs, private foundations, and intermediaries	54
Conclusion	58
Chapter 4 - Selected Projects of the WHO: the adoption of the elements of governance	61
Mectizan Donation Program (MDP)	61
Special Program for Research and Training in Tropical Diseases (TDR)	65
Achievements	68
The "3 by 5" initiative	70

The Malaria Eradication Program (MEP)	71
Chapter 5 - Conclusion	76
References	88

List of Figures

Figure 1. Graphical depiction of the elements of governance	13
Figure 2. Number of NGOs admitted into the WHO over the years	55
Figure 3. The Structure of the Mectizan Donation Program	65
Figure 4. Trends in the number of public-private partnerships in health over time	81

List of Tables

Table 1. Selected examples of global public-private partnerships in health	11
Table 2. The three essential elements of governance	15
Table 3. List of definitions of governance from experts and international organizations	26
Table 4. Historical evolution of the concept of governance	28
Table 5. Effect of partnerships on the working of the WHO	57
Table 6. List of public-private partnerships initiated by the WHO	59
Table 7. Comparative review of the attributes of the four initiatives	74
Table 8. Reasons for transition in the WHO governance structure	78

List of Abbreviations

AIDS Acquired Immunodeficiency Syndrome

DDT Dichloro-diphenyl-trichloroethane

ECOSOC Economic and Social Council

FAO Food and Agriculture Organization

FCTC Framework Convention on Tobacco Control
GAVI Global Alliance for Vaccines and Immunization

GATT General Agreement on Tariffs and Trade

GPPPs Global public-private partnerships

GPG Global Public Good

HIV Human Immunodeficiency Virus
IGOs Intergovernmental Organizations
IHR International Health Regulations
IMF International Monetary Fund

ISC International Sanitary Conferences

LNHO League of Nations Health Organization

MDP Mectizan Donation Program

MEP Malaria Eradication Programme
NGOs Non-governmental organizations

OECD Organization for Economic Co-operation and

Development

OIHP Office International d'Hygiène Publique

PASB Pan-American Sanitary Bureau

PPPs Public-private partnerships

PPPH Public-private partnerships for health

TDR Special Program for Research and Training in

Tropical Diseases

TGNs Transgovernmental networks

TNNs Transnational networks
WHA World Health Assembly

WHO World Health Organization
WTO World Trade Organization

UN United Nations

UNDP United Nations Development Programme

UNICEF United Nations Children's Fund

UNAIDS United Nations Programme on HIV/AIDS

Acknowledgements

I would like to express my utmost thanks and appreciation to my research advisor and mentor, Dr. Justin Kastner, whose incessant help, encouragement, and support always kept me focused and determined. I would like to thank my committee members, Drs. Abbey Nutsch and Jason Ackleson, for the time they took out of their schedules to provide me with valuable insights. I would like to express my special thanks to Colleen Cochran who helped me immensely throughout the process of writing this thesis. I would also like to thank all my fellow students and friends in the *Frontier* program for all their help. I am grateful to Dr. Michael Cates, for providing me with an opportunity to pursue my masters in the MPH program. I am very thankful to Rishi Panjwani and Rohit Kamat for their friendship and support during my stay at K-State. Most importantly I would like to thank my family for their unconditional love and support.

Chapter 1 - Introduction

Introduction

In health, global governance is changing in response to the globalization of diseases, shifting power structures of the government, and security concerns in a politically unstable world.¹ The international organizations have begun to weaken, giving more authority to commercial sectors in global health.² Health systems governance is currently a critical concern in many countries because of increasing demand to demonstrate results and accountability in the health sector, at a time when more resources are being put into health systems.³

Governance, which refers to the interactions between various sectors of society, can be implemented at various levels ranging from corporate and international to national and local.⁴ For the smooth functioning of any undertaking or organization, good governance is a necessary foundation. The ability to coordinate the necessary actions (amongst public and private stakeholders) is reflective of effective governance and is especially important when a country faces security threats that could negatively affect the nation's economy and civil society. With the growth of civil society and enormous new funding for global health from the private sector, new concepts of governance involving a large number of non-state actors are needed. Effective governance often involves international cooperation. Different models of international

¹ Health is defined by the WHO "as a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity." World Health Organization, "Constitution of the World Health Organization," (New York: United Nations, 1946). Public health is the science and art of preventing disease, prolonging life and promoting health through the organized efforts and informed choices of society, organizations, public and private, communities and individuals." C. E. A. Winslow, "The Untilled Fields of Public Health," *Science* 51, no. 1306 (1920).

^{(1920).}Thomas E. Novotny, "Global Governance and Public Health Security in the 21st Century," *California Western International Law Journal* 38, no. 19 (2007). See page 19. This article is based on a speech given by the author at the Weaver Center at the Institute of the Americas in University of California, San Diego on 26 October 2006. Global health is the health of populations in a global context and transcends the perspectives and concerns of individual nations. Theodore M. Brown, Marcos Cueto, and Elizabeth Fee, "The World Health Organization and the Transition From "International" To "Global" Public Health," *American Journal of Public Health* 96, no. 1 (2006).

Sameen Masud Siddiqi et al., "Framework for Assessing Governance of the Health System in Developing Countries: Gateway to Good Governance," *Health Policy* 90, no. 1. A health system can be defined as the structured and interrelated set of all actors and institutions contributing to health improvement. The health system boundaries could then be referred to the concept of health action, which is "*any set of activities whose primary intent is to improve or maintain health*."C. J. L. Murray, "A Framework for Assessing the Performance of Health Systems," *Bulletin of the World Health Organization* 78, no. 6 (2000).

⁴ UNESCAP, "What is Good Governance?," available at http://www.unescap.org/pdd/prs/ProjectActivities/Ongoing/gg/governance.asp.

cooperation that can be embraced include *transgovernmental networks (TGNs)*, which are made up of sub-state level officials rather than the heads of state, and *transnational networks (TNNs)*, which are made up of private actors such as non-governmental organizations and business representatives.⁵ Project researchers⁶ have identified historical and contemporary cases in which governance—particularly as it relates to TGNs and TNNs—may be studied. These cases include the International Sanitary Conference (ISC) of 1851 and the recent international trade policy concept of compartmentalization.⁷

The ISC of 1851 is an example of the presence of TGNs in the realm of public health security. In 1832, pandemic cholera, which is spread via water, caused 21,000 deaths in Paris alone. The first ISC was convened only in July 1851. The representatives who attended were not only the chiefs of government from across Europe, but also lower-level officials, physicians, and sanitation authorities who came together to discuss communicable diseases.⁸ There were ten ISCs convened 1851 onwards. When studied together, the ISCs offer an historical perspective on TGN involvement in the realm of public health security. The delegates from various governments were responsible for reporting the decisions made at the conferences to their governments for future implementation. No treaties or formal agreements were made at the International Sanitary Conferences; the functionality of the International Sanitary Conferences relied on the governments' cooperation in adopting the policies that were discussed. The ISCs can be considered the first efforts at policy convergence to forge international law that would bring balance to international trade and health objectives. 10 The link between international trade agreements and international public health deserves more attention than it has received to date. There are various challenges facing global public health systems and trade. The health sector is one such area that has been significantly affected by globalization, despite its image as a global

_

⁵ Mette Eilstrup-Sangiovanni, "Varieties of Cooperation: Government Networks in International Security," in *Networked Politics* (2009).

⁶ In the FIX (*Frontier* Interdisciplinary eXperience) Program, Dr. Justin Kastner, other students, and the author of the thesis work in this area of research.

⁷ The author's major professor, Dr. Justin Kastner, has a long-term interest in this area.

⁸ Valeska Huber, "The Unification of the Globe by Disease? The International Sanitary Conferences on Cholera, 1851–1894," *The Historical Journal* 49, no. 2 (2006).

⁹ WHO, "International Sanitary Conferences," in *The First Ten Years of the World Health Organization* (Geneva: 1958).

¹⁰ Norman Howard-Jones, "The Scientific Background of the International Sanitary Conferences 1851–1938," *WHO publications* (1975).

public good (GPG).¹¹ Such GPGs cannot be supplied by a single institution or government. Thus governments and public agencies have come together with NGOs and the private sector to establish transnational structures (partnerships, treaties or agreements) to address the supply of GPG and reduction of global public bads.¹²

The facilitation of smooth, unhindered trade requires superior public health systems. The manner in which public health and global trade can work together is through the creation of international networks. This implies the need for transnational cooperation of actors in the area of trade, economics, healthcare, and public health. Compartmentalization is a novel, internationally endorsed policy tool used to facilitate safe trade. It involves governments and companies certifying the biosecurity of specific animal herds and food supply chains. TGNs and TNNs must work together in order to implement the concept of compartmentalization, which allows for "biosecure compartments" to continue to export even if other establishments or geographical areas have food safety or biosecurity problems.¹³ The costs of global diseases, including damage from responses to such threats and restricted trade flows, have made countries more aware of these problems as a matter of special concern for their national interest.¹⁴ The management and coordination of all these players requires the incorporation of principles of good governance into a network's working routine. In order to develop policies and programs for issues encompassing health, trade, and commercial interests, the role of the private sector should be considered especially critical for networks that are transnational in nature.¹⁵ Therefore, it is vital to evaluate the role of TGNs and TNNs in public health and trade security.

History of international health security

The contemporary system of international health surveillance, monitoring, and sanitary regulations did not exist until the 19th century. In spite of this, there is substantial information available regarding the public health capacity of the pre-19th century societies of the Mediterranean and the Middle-East. Many civilizations in these regions were ahead of their

¹¹ David Dollar, "Is Globalization Good for Your Health?," Bulletin of the World Health Organization 79(2001).

¹² Richard G. A. Feachem, "The Role of Governments," in *Critical Issues in Global Health*, ed. Charles Everett Koop, Clarence E. Pearson, and M. Roy Schwarz (San Francisco, CA: Jossey-Bass, 2001).

¹³ A. Scott et al., "The Concept of Compartmentalisation," *Rev. sci. tech. Off. int. Epiz.* 25, no. 3 (2006). The idea of collaborative work between different actors (from both the government and the private industry) at national and international levels is crucial to compartmentalization.

¹⁴ David P. Fidler, "Vital Signs," *The World Today*, February 1 2009.

¹⁵ Eilstrup-Sangiovanni, "Varieties of Cooperation: Government Networks in International Security."

times in the fields of architecture, planning, and engineering, a fact that is evident from the remains of their water supply systems, drainage, and garbage disposal systems. They had knowledge about the causal factors for certain diseases and had tools to address those problems. In the case of Europe, it was a slightly different story. Medieval Europe trailed in scientific technologies, ideas, and practices in comparison with their Persian counterparts. The European continent was in pursuit of power and riches, which led its merchants to conquer resources and land in other parts of the world, thereby increasing travel and movement. The congested towns of Europe were a perfect set-up for disease outbreaks. The middle ages witnessed two massive plague outbreaks. In 542 AD, the pandemic Plague of Justinian decimated populations from Asia to Europe. In order to protect their citizens, governments of affected nations imposed quarantine on ships and persons suspected of carrying the disease. There was no official system of notification or cooperation between city-states. There was a unilateral arrangement to impose quarantine within respective countries rather than a multilateral one. The spread of plague was suspected to be through human contact, especially introduced via ships leading to some of the earliest attempts at international disease control via "quarantine."

Today's global health system evolved through two general periods: the 19th to mid 20th century, and the mid 20th to the early 21st century. European industrialization gave rise to a complex set of needs related to the new-found importance of the health of workers and the general population. The need of the hour was to have uninterrupted trade that was free from disease outbreaks.¹⁸ The emergence of a link between international law and communicable diseases is rooted in the mid-19th century. In 1851, France convened the first International Sanitary Conference (ISC),¹⁹ and then from 1851 to the end of the 19th century, ten such conferences were convened. Eight sanitary conventions were negotiated on the subject of cross-

¹⁶ Anne-Emanuelle Birn, Pillay Yogan, and Holtz Timothy, *Textbook of International Health: Global Health in a Dynamic World*, 3rd ed. (Oxford University Press, 2009). p17- 24. Quarantine that dates back to 1377 was strictly pertaining to plague, when the Rector of the seaport of Ragusa (then belonging to the Venetian Republic) officially issued a 30-day isolation period for ships. Recently, the term quarantine has come to indicate a period of isolation imposed on persons, animals, or things that might spread a contagious disease. Gian Franco Gensini, Magdi H. Yacoub, and Andrea A. Conti, "The Concept of Quarantine in History: From Plague to SARS," *Journal of Infection* 49, no. 4 (2004). p257-261

¹⁷ Aginam Obijiofor, *Global Health Governance : International Law and Public Health in a Divided World* (Toronto: University of Toronto Press, 2005). pp946-951

¹⁸ Alison Bashford, *Imperial Hygiene: A Critical History of Colonialism, Nationalism and Public Health* (Houndmills and New York: Palgrave Macmillan, 2004).

¹⁹ WHO, "International Sanitary Conferences." pp3-5

border spread of cholera, plague, and yellow fever across the geopolitical boundaries of (European) nations, and, within the Americas, the 1905 Inter-American Sanitary Convention imposed notification duties for cases of cholera, plague, and yellow fever. In 1924, the Pan-American Sanitary Code provided for bi-weekly notification of ten specific diseases and any other diseases that the Pan-American Sanitary Bureau might add, and also provided for immediate notification of plague, cholera, yellow fever, smallpox, typhus, or any other dangerous "contagion" liable to spread through international commerce. 20 The World Health Organization (WHO), established on 7 April 1948 and headquartered in Geneva, Switzerland, was created as the first specialized agency under the United Nations with the sole objective of international health co-operation and unification. Article 21 of the WHO constitution delegates the authority to adopt regulations concerning, among other things, procedures like sanitation, quarantine, and others designed to prevent the international spread of disease.²¹ In 1969, as part of the revision effort, the World Health Assembly renamed the ISC, calling it the International Health Regulations (IHR). The IHR, signed by the 194 member states, provided a unified code for infectious disease control. Due to various drawbacks and shortcomings in the IHR, the WHO proposed its revision in 1998, a process that took almost 7 years to complete. The revised draft was eventually presented and accepted in 2005. ^{22,23}

Trade, like health systems, went through a series of transitions. A number of multilateral agreements were put in place to facilitate trade between countries. The barter system, which goes back for centuries, could easily be considered the primary factor behind a country's willingness to initiate interaction with other countries. The barter system started the dialogue process between countries, and eventually evolved into the current international trade agreements. During the period of reconstruction following World War II, the "Bretton Woods" accords helped stimulate economic growth in Europe and Japan by stabilizing inflation and facilitating

²⁰ The interest of governments in international health and the spread of diseases across borders led to the formation of many international health agencies. The agencies will be discussed in detail in chapter 3 of this thesis. Obijiofor Aginam, "International Law and Communicable Diseases," Bulletin of the World Health Organization 9(2002). pp946-947

The WHO Constitution, art. 21

²² The World Health Assembly is the decision-making body of the WHO. It is attended by delegations from all the WHO Member States and focuses on a specific health agenda prepared by the Executive Board. The main functions of the World Health Assembly are to determine the policies of the WHO, appoint the Director-General, supervise financial policies, and review and approve the proposed program budget. WHO Media centre, "World Health Assembly," WHO, available at http://www.who.int/mediacentre/events/governance/wha/en/index.html. ²³ WHO, "International Health Regulations (IHR)," ed. World Health Organization (Geneva: WHO, 2005). (2005)

formulation of trade agreements. Further negotiations, which took place from 1944 to 1947, led to the establishment of the International Monetary Fund (IMF), the World Bank, and the General Agreement on Tariffs and Trade (GATT). 24,25 The World Trade Organization (WTO) replaced the GATT in 1995. The functions of the WTO include administering WTO trade agreements, handling trade disputes between nations and monitoring national trade policies, and acting as a forum for trade negotiations. With the establishment of the WTO, the IHR, and other multilateral organizations and agreements, the world has witnessed pronounced globalization. Globalization is a process that is changing the nature of human interaction across a wide range of spheres and dimensions.²⁶ The disparity between the developed and developing world has led to intractable South-North animosity in most multilateral institutions, including the WHO. The onset of the 21st century witnessed an accelerated polarization of the world less by geo-political boundaries and ethno-cultural affinities and more by poverty and under-development. The gap between the developed and developing world is widening. According to the WHO, poverty is the world's most ruthless killer and is the greatest cause of ill-health and physical suffering.²⁷

Globalization and governance

As the title of Thomas L. Friedman's book rightly puts it, The World is Flat. Owing to the phenomenon of globalization, the world is getting "smaller" each day. He defines globalization as "the inexorable integration of markets, nation-states, and technologies to a degree never witnessed before—in a way enabling individuals, corporations, and nation-states to reach around the world farther, faster, and by cheaper means than ever before."28 Increased globalization and travel has facilitated a greater mixing of cultures, customs, and ideas, as well as a rapid cross-border flow of goods, services, people, and capital. Some might argue that globalization has also resulted in new security threats, greater global health problems, increased

²⁴ The "Bretton Woods" agreement, signed in July 1944, created the Bretton Woods financial system. It was based on stable and adjustable exchange rates. The system established a gold standard that required a commitment from each country to maintain a fixed value for the exchange rate of its currency in terms of gold. I. Yotov, The Quarters Theory: The Revolutionary New Foreign Currencies Trading Method (Hoboken, NJ: John Wiley & Sons, 2009). See

Ellen R. Shaffer et al., "Global Trade and Public Health," American Journal of Public Health 95, no. 1 (2005). ²⁶ K. Lee, "For Debate. The Impact of Globalization on Public Health: Implications for the UK Faculty of Public Health Medicine," Journal of Public Health 22, no. 3 (2000).

²⁷ Lincoln Chen, Jennifer Leaning, and Vasant Narasimhan, Global Health Challenges for Human Security (Cambridge: Harvard University Press, 2003).P 54

⁸ T.L. Friedman, *The Lexus and the Olive Tree* (New York: Farrar, Straus, Giroux, 2000). P 9

economic disparity, and fragmentation of power.²⁹ The links between globalization and health are complex and the consequences of globalization (both good and bad) impact every segment of the world's population. The threat of misuse of globalized information for bioterrorism purposes is becoming a serious concern for many governments. On the other hand, globalization has also resulted in some gains for the health sector. One such gain has been the advent and proliferation of information technology. Improvements in information technology have dramatically increased the speed and ease of data flow, speeding up clinical research, and facilitating the sharing of information across borders and continents.³⁰ While it is uniformly believed that poverty and under-development breed disease, assessing the actual impact of globalization on public health remains controversial. Globalization enables disease-causing pathogens to transcend boundaries with ease. The process of globalization and subsequent vulnerability of national borders have altered the traditional distinction between national and international health.³¹ Globalization has impacted the health status and altered the policy-making abilities of many countries worldwide. Opponents of globalization have argued that states will have little opportunity to exercise their powers in a global environment that is now mostly shaped by private actors.³² The unimaginable increase in interconnectedness between social and economic sectors has led to new, as well as reemerging health threats like Severe Acute Respiratory Syndrome (SARS) and avian influenza. 33,34 Trade barriers are also disappearing, which means that populations have increased chances of exposure to infectious diseases from every possible corner of the world. Global trade will continue to thrive and expand with improvements in transportation, infrastructure, marketing networks, and per-capita income levels. As a result of this expansion, consumers in developed countries are demanding more rigorous health standards. The changing conditions of global trade have raised important challenges for public health: privatization of public services; reduced

²⁹ One cannot disregard either of these viewpoints; there is some validity in both of them. D. Yach and D. Bettcher, "The Globalization of Public Health I: Threats and Opportunities," *American Journal of Public Health* 88, no. 5 (1998).

³⁰ Tikki Pang and Emmanuel G. Guindon, "Globalization and Risks to Health," *EMBO reports* 5, no. S1 (2004).

³¹ Obijiofor, *Global Health Governance : International Law and Public Health in a Divided World.*

³² W. H. Reinicke and J. M. Witte, *Interdependence, Globalisation and Sovereignty: The Role of Non-Binding International Legal Accords* (Oxford University Press, 1999).

³³ Andrew Cooper and John Kirton, *Innovation in Global Health Governance: Critical Cases* (Burlington, VT: Ashgate Publishing Ltd, 2009). P 4

³⁴ There is a high probability of encountering risk factors for chronic diseases too, especially through marketing of unhealthy products like tobacco and junk food. This diminishes public health standards in many ways. In the age of closer boundaries and bioterrorism, it is critical to be conscious of the events happening around the world and join hands for confronting the challenges associated with the new age.

sovereignty of governments in regulating services, medications, equipment, and economic activities (particularly those that affect occupational and environmental health); and enhanced power of multinational corporations and international financial institutions in policy-making.^{35,36} Some experts predict that access to healthcare, health related knowledge, and technology will be greatly influenced by forces outside national sovereign control.³⁷

Globalization affects health in a multifaceted manner. The increase in global public-private partnerships (GPPPs) can indeed be attributed to globalization. In the 1990s, the health sector experienced a tremendous rise in the number of alliances between the United Nations (UN) agencies and the private (for-profit) sector.³⁸ This rise is helping to solve some major health problems, but at the same time it is likely to weaken the WHO's authority over health worldwide. Today, health systems are policy rich and capacity poor in developing nations. There is a dire need for improving and building capacity in order to confront emerging and re-emerging diseases and public health security threats.³⁹ The tremendous amount of interaction and interdependence between various players requires efficient networking coupled with cooperation and planning in the form of good transnational governance. Governance is not the same as government.⁴⁰ It is a continuous process followed and coordinated by multiple state and non-state actors, or public and private sector associates. There are different levels at which governance is vital. Governance pertains to varied sorts of collective behavior ranging from local community groups to transnational corporations, labor unions, and the UN Security Council. Governance relates to the combination of public and private spheres of human activity. The

³⁵ Shaffer et al., "Global Trade and Public Health." See page 33. The author discusses the positives of a trade and health partnership. He favors the collaborated method of formulating agreements.

³⁶ The author of this thesis has profound interest in studying the significance of the various actors engaged in ensuring import security. In this context, the author has submitted a manuscript titled "Multiplicity of Actors Involved in Securing America's Food Imports" to the *Journal of Homeland Security and Emergency Management* and the article is currently under review. The article has Colleen Cochran and Dr. Justin Kastner as the second and third author respectively. The paper discusses the importance of the need for a collaborated effort of federal government and the private industries to ensure food import security in the US.

³⁷ R.D. Smith, "Foreign Direct Investment and Trade in Health Services: a Review of the Literature," *Social Science and Medicine* 59(2004). Foreign insurance companies will be able to offer services within a country and affect both the health care sector and the common man.

³⁸ K. Buse and G. Walt, "Global Public-Private Partnerships: Part II - What Are the Health Issues for Global Governance?," (WHO, 2000).

³⁹Public health security, which includes food and agriculture security, is defined as the proactive and reactive activities required for minimizing the public's vulnerability to acute public health events that endanger the collective health of national populations. World Health Organization, "A Safer Future: Global Public Health Security in the 21st Century," in *The World Health Report 2007* (Geneva: WHO, 2007). Pg 9

⁴⁰ There is a universal misconception that governance is exclusively a government's responsibility. It should ideally involve rigorous thought process and decision making by players from diverse fields and not just the public sector.

former Secretary-General of the United Nations, Kofi Annan, said, "Good governance is perhaps the single most important factor in eradicating poverty and promoting development." This is an apt reflection of a dire need of good governance in today's global context. The following definition, articulated by Drs. Jason Ackleson and Yosef Lapid, best describes the complex structure of governance as:

"Policy actions which are the result of a process which involves both formal and informal actions, coordination, and management by different political, economic, and social actors – in addition to governments. These actions occur on multiple levels, such as the international, national, regional, and local." ⁴³

Partnerships are essential in the contemporary world, as the problems we face require multisectoral, multidisciplinary, and multicomponent efforts. ⁴⁴ There are several health-related PPPs in existence, including the STOP TB initiative, the Multilateral Initiative on Malaria, the Global Alliance for Vaccines and Immunization (GAVI), the Mectizan Donation Program (MDP), Healthy Cities and Health 21, and the Global Fund for AIDS, TB, and Malaria among others. These PPPs aid in fund allocation, research and development, and medical supply distribution. Despite these merits, they are known to bring with them problems like poor harmonization between stakeholders and national governments, commercialized approaches to public health, and intrusion into the public sector. ⁴⁵ Although GPPPs are emerging as a distinct form of global governance, little analysis has been done to address these problems. ⁴⁶

.

⁴¹ Regina Birner, "Improving Governance to Eradicate Hunger and Poverty," in *2020 Focus Brief on the World's Poor and Hungry People* (Washington D.C.: IFPRI, 2007).

⁴² S. Siddiqi et al., "Framework for Assessing Governance of the Health System in Developing Countries: Gateway to Good Governance," *Health Policy* 90, no. 1 (2009). P 14

⁴³ Dr. Jason Ackleson, June 2010. Washington D.C. During the author's research visit to D.C. in the summer of 2010, she met with Dr. Ackleson to gain more insight on the subject of governance. Dr. Ackelson explained the definition of governance put forth by Dr. Yosef Lapid and himself at New Mexico State University.

⁴⁴ William C. Richardson and John P. Allegrante, "Shaping the Future of Health through Global Partnerships," in *Critical Issues in Global Health*, ed. Charles Everett Koop, Clarence E. Pearson, and Schwarz M. Roy (San Francisco, CA: Jossey-Bass, 2001). In this complex and interdependent global society, promoting the cause of health will require a long-term commitment to cooperation among public agencies, private authorities, and nonprofit sectors.

 ⁴⁵ M.R. Reich, "Public-Private Health Partnerships for Public Health," *Nature Medicine* 6, no. 6 (2000).
 ⁴⁶ See page 43 in Kelley Lee, Kent Buse, and Suzanne Fustukian, *Health Policy in a Globalising World* (Cambridge: Cambridge University Press, 2002). The author of the thesis found insights into examples of various GPPPs in operation.

There are three categories of health GPPPs: 47,48

- 1. Product-based partnerships: These are initiated by the private sector and are primarily drug donation programs created to increase coverage. Such partnerships are generally established after the discovery of an existing drug's effectiveness (for animals or humans) in the treatment of a condition for which there is limited effective demand, due to lack of ability to pay. In these partnerships, the private sector seeks to establish political contacts and establish a global reputation.
- 2. Product-development based partnerships: These are initiated by the public sector and focus on pharmaceutical product development for diseases of the developing world. These partnerships are not targeted to specific countries and are driven based on market failure. Although these products are a worthy investment, the market is unable to allocate resources for their discovery and development because their returns are unpredictable. PDPs are created for the public good and the resulting products are made affordable to all who need them.
- 3. Issues/systems based partnerships: These types of partnerships help to overcome market failure and bring strategic consistency to the different approaches (from various actors) in combating a single disease. Examples include the Roll Back Malaria initiative and the STOP TB initiative, among others.

For examples of the types of GPPPs, see Table 1.

⁴⁷ K. Buse and G. Walt, "Global Public-Private Partnerships: Part I-A New Development in Health?," *Bulletin of the World Health Organization* 78, no. 4 (2000).

⁴⁸ Lee, Buse, and Fustukian, *Health Policy in a Globalising World*. See p 45-47

Table 1. Selected examples of global public-private partnerships in health

Type of GPPP	Name/Date	Partners & Donors	Goal
Product-based GPPPs	Mectizan Donation Program (MDP) 1987	 Merck & Co. WHO World Bank Task Force on Child Survival and Development National authorities NGOs⁴⁹ 	Eliminate onchocerciasis by treating affected populations with Mectizan, a drug developed by Merck & Co.
Product-development based GPPPs	International AIDS Vaccine Initiative (IAVI) 1999	 National AIDS Trust Albert B. Sabin Vaccine Institute World Bank UNAIDS GSK Bill and Melinda Gates Foundation Rockefeller Foundation 	Ensure development of safe, preventive, effective, and accessible HIV vaccines for use throughout the world.
Issues/systems based health GPPPs	Roll Back Malaria	 WHO, UNICEF, UNDP and the World Bank, 500 partners that are organized in 8 constituencies, and NGOs 	Aims to reduce malaria morbidity and mortality by reaching universal coverage and strengthening health systems

Sources: Frost, L, and M Reich. "Mectizan Donation Program: Origins, Experiences, and Relationships with Co-Ordinating Bodies for Onchocerciasis Control." Boston: Harvard School of Public Health, 1998. Buse, K. "Global Public-Private Health Partnerships: Part II-What Are the Health Issues for Global Governance?" *Bulletin of the World Health Organization* 78, no. 5 (2000): 699. Lee, Kelley, Kent Buse, and Suzanne Fustukian. *Health Policy in a Globalising World*. Cambridge: Cambridge University Press, 2002.

..

⁴⁹ The MDP relies on Nongovernmental Development Organizations (NGDOs) to ensure efficient distribution of Mectizan. The prominent NGOs include the Carter Center, Charitable Society for Social Welfare (CSSW), Helen Keller International (HKI), International Eye Foundation (IEF), Lions Clubs International Foundation (LCIF), and United Front against River Blindness (UFAR) amongst others. Mectizan Donation Program, "Partners," MDP, available at http://www.mectizan.org/nongovernmental-development-organization-ngdo-partners.

Horizontal interaction is needed between research groups, national governments, and funders within different countries. It is alarming that only ten percent of research funds are spent on diseases that account for 90 percent of the global disease burden. Good governance is necessary for ensuring the conduct of ethically sound research, especially in vaccine development. The people of Third World nations are thought to benefit from the health research carried out by the wealthier nations, but this is not always true.⁵⁰ Research workers and experts have started to migrate from public to private domains and from the developing to the developed world, resulting in a process that has been informally dubbed "the brain drain." This drain on human resources limits the developing nations' ability to participate in political debates, decision making, and global health governance; this, in turn, decreases their efficiency and authority in policy-making and research.⁵¹ Arriving on one single characterized definition of governance is difficult, especially as definitions of governance tend to vary according to the objectives of organizations. In analyzing the various models of governance put forth by different internationally renowned organizations, and analysts, it seems appropriate to have the Ackleson-Lapid elements as an indispensable part of the governance structure of the different organizations' and projects' discussed in this thesis. The governance pattern should incorporate three core elements engaging in formal-informal policy action, forging public-private partnerships, and interacting at multiple levels of society.

⁵⁰ Kelley Lee and Anne Mills, "Strengthening Governance for Global Health Research: The Countries That Most Need Health Research Should Decide What Should Be Funded," *British Medical Journal* 321, no. 7264 (2000). Kelley and Mills argue that it is unethical to test AIDS vaccines or drugs in countries that cannot afford these treatments.

⁵¹ Chitr Sitthi-amorn et al., "/ Strengthening Health Research Capacity in Developing Countries: a Critical Element for Achieving Health Equity / Commentary: Health Research and Human Development in Papua New Guinea / Commentary: Does Strengthening Research Capacity Improve Health Equity?," *British Medical Journal* 321, no. 7264 (2000).

State Government officials, legislatures, judiciaries, and military Formal and informal policy actions*and

Private Sector
Enterprises at local, national, and multinational level

Formal and informal policy actions*and public-private partnerships,* involving social, political and economic players at multiple levels*

Civil Society
NGO's and
community
based
organizations,
and religious
groups

Figure 1. Graphical depiction of the elements of governance

Note: *Public-private partnerships* form a vital part of the description, linking the local, national, and global levels of governance. Asterisks (*) indicate the key elements of governance, as put forward by Ackleson and Lapid, the presence of which are explored in this thesis. ⁵² Julianne Jensby, the author's colleague at K-State and *Frontier*, helped develop this depiction of the elements of governance. For more details, see Table 2.

⁵² Personal communication with Dr. Jason Ackleson, Washington D.C., June 2010. During the author's research visit to D.C. in the summer of 2010, she met with Dr. Ackleson to gain more insight on the subject of governance. Dr. Ackleson explained the definition of governance put forth by Dr. Yosef Lapid and himself at New Mexico State University.

Research questions, objectives, and methodologies

Governance is an important facet of the success of any institution, event, or undertaking. In order for the different international organizations and networks to function efficiently, they should incorporate elements of governance. Applying and incorporating the various attributes of governance requires planning, implementation, and critical thinking. With this in mind, the thesis poses the following overall research questions:

- 1. How do prevailing public health security related international organizations, specifically the World Health Organization (WHO) and some of its initiatives, exhibit the implementation of the elements of governance?⁵³
- 2. How has the implementation of the elements of governance changed over time in the WHO?

The thesis tries to answer these overall questions through the following objectives:

- a. Analyzing the concept of global governance, the reasons for the evolution of different governance structures in the WHO, and the impact of these factors in the field of global public health in general.
- b. Reviewing the WHO and some its projects and initiatives, in order to ascertain the presence or absence of the essential elements of governance (see Table 2) over time.
- c. Illustrating certain examples of models or initiatives wherein the WHO has embraced and adopted these elements of governance.

See Table 2 for a summary of the three essential elements of governance used to guide this thesis project.

⁵³ The term "security" needs special mention. Most of the multilateral or bilateral organizations in trade and health have been established to achieve security. Security involves many things including preservation of life. Dr. Justin Kastner mentioned this in his lecture "Globalization and Food and Agricultural Security," at Kansas State University on 20 May 2010.

Table 2. The three essential elements of governance

Formal & informal policy actions	Public-private partnerships	Multiple levels
 Brokered in meetings, discussions, and forums Brokered by individuals from the government, the private sector, and the NGO community 	 Bring together at least three parties: a corporation and/or industry association, an intergovernmental organization, and a member of civil society Encourage broader understanding of—and wider range of solutions for—global issues (e.g., health, trade, etc.) May help participants to achieve shared goals on the basis of a mutually agreed upon division of labor 	 Involves local, national, and international levels Facilitates vital transnational networking and cross- border relationships

Note: The elements of governance mentioned are a non-exhaustive list of key elements. These attributes are foundational for the smooth implementation of indispensable auxiliary factors like transparency, rule of law, respect, and consideration for human rights in the governance structure.

Conducting case studies is an interesting and useful way to evaluate any concept and its application in the real world.^{54,55,56} Focusing on strengthening the future of public health and trade security issues requires incorporation of the elements of governance into the current global systems. Inductive reasoning was used to analyze the objectives and answer the research questions of this thesis.^{57,58} Inductive reasoning argues from the specific to the general. The

⁵⁴ Case studies are used to organize a wide range of information about a case and then analyze the contents by seeking patterns and themes in the data and by further analysis through cross comparison with other cases. Case studies are an interesting way of public health research. It is a research strategy that focuses on exploration of a complex phenomenon and related context. It helps us to critically think through the background information about a particular theory/practice using a working example. Peter Lydyard et al., *Case Studies in Infectious Disease* (Garland Science, 2009).

⁵⁵ Leonard G. Horowitz, "Case Study in the Public Health Menace of Tuberculosis (TB) Testing," *Medical Veritas* 4 (2007).

<sup>(2007).

&</sup>lt;sup>56</sup> L. J. Mata, *The Children of Santa Maria Cauque: a Prospective Field Study of Health and Growth*, ed. Costa Rica University Institute of Health Research (MIT press, 1978).

thesis tries to reiterate that incorporation and appropriate execution of the three elements of governance is essential for efficient and successful functioning of any health organization, initiative, or project. By taking the approach of institutional history, this thesis tries to analyze and evaluate the structure of a major international health institution, the World Health Organization (WHO). The thesis further analyzes some selected projects of the WHO (both successful and unsuccessful) to discern their effectiveness in implementing elements of governance in their working agenda. The thought behind comparing these initiatives with contradicting outcomes was to assess the cause for variability in the execution of good governance among prominent international organizations. The thesis begins with specific observations and measures to detect patterns and regularities among the cases that are explored, and eventually develops some general conclusions or theories. Hence, the thesis progresses from having a component (the three elements of governance) as the specific factor to eventually arriving at the conclusion that there is a positive correlation between success of a health organization or initiative and the effective inclusion of the three elements of governance.⁵⁹

World Health Organization

The WHO, headquartered in Geneva, Switzerland, is a specialized agency of the United Nations (UN) that acts as a coordinating authority for international public health. It was established on 7 April 1948, and the agency inherited its mandate and resources from its predecessor, the Office International d'Hygiène Publique (OIHP).^{60,61} The WHO has been

. _

⁵⁷ Inductive reasoning is one of the two basic forms of valid reasoning. It is of particular importance in qualitative research approaches. It seeks to generate general statements based on observations or efforts to develop theory from empirical data. LM Given, *The Sage Encyclopedia of Qualitative Research Methods* (Sage Publications, 2008). It is one of the most commonly used research methodologies in the social sciences and also the hard sciences, but one must exercise caution while deriving conclusions beyond the original cases or settings.

⁵⁸William M.K. Trochim, "Philosophy of Research - Deduction and Induction," in *Research Methods Knowledge Base* (Atomic Dog Publishing, 2006). Most social research involves both inductive and deductive reasoning processes at some point in the project.

⁵⁹ Inductive reasoning progresses from observations of individual cases to the development of a generality. It

⁵⁹ Inductive reasoning progresses from observations of individual cases to the development of a generality. It follows this order: observation to pattern to tentative hypothesis to theory. In the real world, humans tend to follow inductive reasoning.

⁶⁰ World Health Assembly, "Constitution of the World Health Organization," ed. WHO, October 2006 (Geneva 2006).

⁶¹ WHO, "Archives of the Office International D'hygiène Publique (OIHP)." The Office International d'Hygiène Publique (OIHP) established in Rome on 9 December 1907, was governed by the authority of the Permanent Committee composed of delegates technically qualified in the field of health, designated by the member states. The Office was dissolved under the protocol provided for OIHP in the agreements signed on 22 July 1946. Its epidemiological service was officially transferred to the Interim Commission of WHO on 1 January 1947.

instrumental in eradicating smallpox (once among the most feared diseases) and has helped contain sanitation-related diseases such as cholera and typhoid, as well as relatively new ones such as SARS and HIV. It has led efforts in health-related fields like sanitation, injury prevention, and public health, and is currently working to combat tobacco use and chronic diseases like cancer and diabetes. 62 In 1969, as part of the revision effort, the World Health Assembly (WHA) renamed the International Sanitary Regulations, calling it the International Health Regulations (IHR). Both the IHR and the Framework Convention on Tobacco Control (FCTC) are legal mechanisms used by the WHO to govern global health issues, and the latter is a treaty regarding the restrictions of tobacco advertisement, sponsorship, and promotion. This helps to crack down on tobacco smuggling too. The IHR's purpose is "to ensure the maximum protection against the international spread of disease with minimum interference with world traffic," an aim that captures the WHO's core objectives. 63 As an organization spanning national governments, the WHO also plays an important role in initiating the development of international law in health. It has been labeled unsuccessful in many of its efforts, but hugely successful in some others. It is important to examine the policies and collaborations in which the WHO is currently involved to assess the reasons for its success in some projects and its failures in others. While the WHO's detractors support its focus on disease prevention and eradication, many argue that success has often eluded the WHO because the organization is too bureaucratic and decentralized to effectively and efficiently target funds and efforts. The WHO has faced strong criticism for its alleged inefficiency in governance, and recent directors-general have pledged that improved efficiency will be a top priority. It is important to study the governance structure of the organization to evaluate its failures in programs and projects.

Initiatives

The WHO participates in a number of partnerships, programs, and alliances for global health development. Recently, there has been a surge in the number of global health initiatives. The pharmaceutical industry has played a significant role in initiating several of these partnerships with private foundations like the Bill and Melinda Gates Foundation. Owing to its international authority in public health, the WHO is, by default, an integral member in most of

⁶² World Health Organization, "About WHO," WHO, available at http://www.who.int/about/en/.

⁶³ WHO, "International Health Regulations (IHR)."

these partnerships. According to the WHO, both Global Health Initiatives (GHIs) and PPPs have global strategies to target specific communicable and non-communicable diseases. They pour substantial resources into the system in order to achieve their desired results. Such initiatives are thought to be one of the benefits of globalization. ⁶⁴ The Mectizan Donation Program (MDP) is a PPP created by Merck and the Task Force for Child Survival and Development (an NGO). The WHO has been the MDP's integral partner since its establishment. Its commitment to the project has been remarkable, and the MDP has been considered one of the most successful PPPs to date. The Global Alliance for Vaccines and Immunization (GAVI) is another global effort that seeks to strengthen childhood immunization programs and bring a new generation of recently licensed vaccines into developing countries. These include vaccines against hepatitis B, childhood meningitis, yellow fever, and respiratory infections—diseases that together form the leading cause of death in children under age five. 65 Tropical Diseases Research Programme (TDR), established in 1975 by the WHO, is a Special Program for Research and Training in Tropical Diseases. It is a global program of scientific collaboration that helps to coordinate, support, and influence global efforts to combat major diseases among the poor and disadvantaged. It is cosponsored by the United Nations Children's Fund (UNICEF), the United Nations Development Program (UNDP), and the World Bank. The Smallpox Eradication Program, launched in 1966 by the WHO, historically remains one of the great achievements of the WHO. In 1980, the 33rd World Health Assembly endorsed the conclusions of the Global Commission for Certification of Smallpox Eradication that smallpox had been eradicated worldwide and that the return of the virus was unlikely. Initiatives like the Malaria Eradication Program by the WHO and the "3 by 5" initiative, launched by the UNAIDS and the WHO, have both been declared failures. This thesis discusses these initiatives in detail in subsequent chapters.

This thesis seeks to gather information by employing institutional history to delve further into the structure of old international health organizations, looking at predecessors of the WHO and then eventually the WHO itself. An institutional history draws out and synthesizes lessons that may prove useful for research organizations and partners, as well as for others in similar

 $^{^{64}}$ World Health Organization, "Global Health Initiatives," WHO, available at http://www.who.int/trade/glossary/story040/en/index.html. 2008

circumstances.⁶⁶ The thesis also looks to compare the complex governance structures of the World Health Organization over decades. Different perspectives on the evolution and adaptation of the three elements of governance over time will be analyzed. For this purpose, the thesis will feature information from resources such as literature reviews (journal articles, database searches, books), personal interviews, seminars, conferences, videos, and audiofiles (podcasts).⁶⁷ The thesis is structured according to the following overall research approach:

Chapter 2 reviews the concept of governance by discussing the concept of global governance. This chapter also lists the different definitions and explanations of governance put forth by various international organizations and experts. The chapter then goes on to explain the significance of governance in global health based on the Ackleson-Lapid definition from which the three essential elements of governance are distilled. The second half of the chapter analyses the shift in governance structures in international public health over time. It provides an overview of PPPs, focuses on some important partnerships in the current global health scenario, and concludes by reiterating the importance of incorporating the three elements into any health initiative.

Chapter 3 summarizes the history of international cooperation in international health and the predecessors of the WHO. The second half of the chapter explains the process of the creation of the WHO, identifies and tracks the evolution of its governance structure over decades, searches for the three elements of governance in the organization, and studies their implementation over time. The chapter cites the reasons for the creation of an international health organization like the WHO and highlights some landmarks achieved by the organization over the past sixty years.

Chapter 4 illustrates selected initiatives where the WHO has been an integral partner. The chapter discusses successful projects like the Mectizan Donation Program, GAVI, and TDR, as well as ineffective ventures like the Malaria Eradication Program, and the "3 by 5" AIDS

⁶⁶ Shambu Prasad, Laxmi T, and Wani SP, "Institutional Learning and Change A Case Study of the Tata-Icrisat Project," (Andhra Pradesh, India: Institutional Learning and Change (ILAC) Initiative., 2006). Distinct case studies offer a broad understanding of the requirements for the making of a promising organization.

⁶⁷ The interviews have been designed to confirm or further explain the information that the author gathered from the literature review of these issues.

⁶⁸ The thesis will have the definition of governance put forth by Ackleson-Lapid as the primary reference for analysis and comparisons. The three elements include engaging in formal informal policy actions, building public-private partnerships, and having collaborations at multiple levels (local, national, and international). The thesis stresses on the observation that for efficient functioning of any health system or venture, implementation of the three elements of governance is essential.

initiative.⁶⁹ It compares the governance frameworks reflected in each of these initiatives and then proceeds to postulate reasons for each initiative's success and/or failure. The data will be compiled from discoveries made through readings, interviews, database searches, podcasts, conferences, and seminars.

Chapter 5 returns to the two primary research questions and reviews the reasons for the incorporation of a new governance structure in the WHO. To address the questions, this thesis explores the conditions under which multilateral organizations and non-state actors would cooperate, and states would support this public-private cooperation. It is followed by a discussion of the degree to which the execution of the elements of governance has determined the success or failure of the organization and WHO's selected initiatives. Based on a review of the WHO and its selected initiatives, this chapter offers suggestions for mapping the future of international health security. This chapter does so by endorsing the three elements of governance.

⁶⁹ Taking examples of contradicting outcomes is a valuable analytical method. It would be interesting to examine the different approaches of the WHO towards these projects. One observation to be noted is that WHO has a list of conditions and considerations for PPPs to be recognized as an opportunity for the WHO.

Chapter 2 - The Concept of Governance

Making sense of global governance

Governance is not synonymous with government. Although both terms refer to goaloriented activities, the term "government" suggests activities that are backed by formal authority, whereas "governance" refers to activities that are backed by the shared goals of a number of entities. These goals may or may not derive from formally prescribed responsibilities and do not necessarily rely on police-based powers to overcome defiance and attain compliance.⁷⁰ Historically, there has been much confusion surrounding the concept of governance. Many academicians and experts in the field of international relations refer to governance as a complex structure involving both the public and the private sectors, while some popular writers associate it synonymously with government.⁷¹ The objectives of governance are the same as those of government; the difference between the two lies in the process of reaching those objectives.⁷²

Globalization has caused a divergence in practices of governance, resulting in a convergence of state institutions and non-state policies. The concept of governance covers extensive ground, making it critical for addressing the complex issues of a globalized world, in which sovereign nation states regularly face the challenge of responding to the problems beyond their own borders.⁷³ There is now a need for closer global governance; hence, it is important to go beyond the Westphalian System of governance (derived from the term "Peace of Westphalia").74 In the Westphalian System, the national interests and goals of states (and, later nation states) were widely assumed to go beyond those of any citizen or any ruler. States became the primary institutional agents in an interstate system of relations. ^{75,76} Influence of outside actors

James N. Rosenau, "Governance in the Twenty-First Century," *Global Governance* 1, no. 1 (1995).
 Thomas G. Weiss, "Governance, Good Governance and Global Governance: Conceptual and Actual Challenges," Third World Quarterly 21, no. 5 (2000).

⁷² Kent Buse, Wolfgang Hein, and Nick Drager, Making Sense of Global Health Governance: A Policy Perspective (Hampshire, England: Palgrave Macmillan, 2009).

Novotny, "Global Governance and Public Health Security in the 21st Century."

⁷⁴ Yale Avalon Project and Yale Law School, "Treaty of Westphalia: Peace Treaty between the Holy Roman Emperor and the King of France and Their Respective Allies," Lillian Goldman Law Library, available at http://avalon.law.yale.edu/17th_century/westphal.asp. The term Peace of Westphalia denotes a series of peace treaties signed between May and October of 1648 in Osnabruck and Munster. The treaties, based on the concept of sovereign states initiated a new political order in Europe.

75 M. Gabel, *Global Inc: An Atlas of the Multinational Corporation* (New York: New York Press, 2003).

was not recognized. The sovereignty and equality of nation, is the linchpin of the international system within which the UN, and hence WHO, operate. In the Westphalian System, the WHO was both the "organizational platform" for nation-states as norm carriers. The classical example of a Westphalian structure in international health is the International Health Regulations (IHR), adopted by the WHO in 1969 from the international sanitary conventions in force at that time. The objectives of the IHR are pure Westphalian doctrine: to ensure the maximum security against the international spread of disease with minimal interference with world traffic. At the heart of the IHR is a surveillance activity that requires notification of the international community through the WHO.⁷⁷ Since the late 1980s, health governance strategies began to deviate from the traditional Westphalian system. In the post-Westphalian System, the WHO has become more important due to the increased international and also, within the WHO, non-state actors have more informal influence. ⁷⁸ Multiple player involvement in international health stems from the private sector's desire to be a part of the global regulatory and decision-making framework. It is also notable that the actions of one sector have an impact on the other sectors.⁷⁹ This thesis proposes that innovation in governance via the proliferation of different players may help to create a sustainable, win-win situation for all the parties concerned.

Governance has undergone refinement and transformation over time. Recently, global governance has become a popular buzzword within communities of international relations and the broader social sciences. Robert Global governance acknowledges the diversity of decision-making styles (political and social), and it grants equal importance to nongovernmental organizations (NGOs), transnational networks, and scientific professionals. It is important to

⁷⁶ Academicians and policy experts visualize the current globalized world as an "interdependent global village," within which pathogens and diseases transcend the fading national boundaries threatening populations in far off distances. Thus, it is important to look beyond the Westphalian system of governance.

⁷⁷ Patrick Wallis, "SARS, Governance and the Globalization of Disease," *Social History of Medicine* 18, no. 3 (2005).

⁷⁸ Wolfgang Hein and Lars Kohlmorgen, "Transnational Norm-Building in Global Health: The Important Role of Non-State Actors in Post-Westphalian Politics," in *Sixth Pan-European Conference on International Relations* (Turin: GIGA, 2007).

⁷⁹ Buse and Walt, "Global Public-Private Partnerships: Part I-A New Development in Health?."

⁸⁰ Klaus Dingwerth and Philipp Pattberg, "Global Governance as a Perspective on World Politics," *Global Governance* 12(2006). Page: 185

⁸¹ One of the seminars at the Global Health Council's annual conference in Washington D.C., in June 2010 had Hedayatullah Saleh, an analyst and specialist in governance from Management Sciences for Health (non-profit group), speak about the importance of governance in health systems strengthening. She works in developing health systems in war hit nations like Afghanistan. Saleh voiced the exact sentiments of authors Dingwerth and Pattberg.
⁸² Weiss, "Governance, Good Governance and Global Governance: Conceptual and Actual Challenges." page: 191

clarify that the term "global governance" takes into account not only the formal institutions and organizations through which the management of international affairs is often sustained, but also includes a wide (and seemingly ever-growing) range of actors in every domain.83 New governance structures have emerged over time as a result of people's efforts to work around undesirable characteristics such as unrepresentative, bureaucratic governments, and inefficient non-market systems, which were prevalent in the 1960s and 1970s. 84,85 In the late 1980s, the field of international development made a dramatic shift toward programs that supported flexibility and the fundamental realignment of economies in developing countries. This resulted in a reduction of the state's role, removal of government subsidies, the privatization of state businesses, the liberalization of pricing, and the opening of borders to the flow of international trade and finance. The state was no longer regarded as the provider of economic and social development, but rather as a partner, catalyst, and facilitator of that objective. The improvement in relationships among economic, political, and social actors is also due to a revolution in technology, communication, and networking. This has simplified the process of transnational governance for market actors, NGOs, private companies, religious groups, and, in some cases, even criminal groups.⁸⁶

Definition of governance

Global governance provides a nexus of rule-making, political coordination, and problem solving that transcends boundaries.⁸⁷ The current international focus is on the evolving system of political coordination (formal and informal) across multiple levels, from local to global. Public authorities and private players are working together to resolve problems collectively. The *public* sector here refers to national, provincial/state and district governments; local government

.

⁸³ James N. Rosenau, "Governance in the Twenty-First Century," in *The Study of World Politics Volume 2: Globalization and Governance* (Routlege, 2006).

⁸⁴ Crucial decisions and rules often are held up in red tape politics. This form of stagnant governance structure was common during the 1960s-1990s.

⁸⁵ Weiss, "Governance, Good Governance and Global Governance: Conceptual and Actual Challenges." Nonmarket system refers to internal and external organizing and correcting factors that provide order to market and other types of societal institutions and organizations – economic, political, social and cultural – so that they may function efficiently and effectively as well as repair their failures. J. J. Boddewyn, "Understanding and Advancing the Concept of Nonmarket," *Business & society* 42, no. 3 (2003).

⁸⁶David Held and Anthony McGrew, *Governing Globalization: Power, Authority, and Global Governance* (Cambridge: Blackwell Publishing Company, 2002). p21-24

⁸⁷ James N. Rosenau, "Toward an Ontology for Global Governance," in *Approaches to Global Governance Theory*, ed. Martin Hewson and Timothy J. Sinclair (Albany, NY: SUNY press, 1999).

institutions and inter-governmental agencies. The term *private* sector denotes two sets of structures: the *for-profit* private sector encompassing commercial enterprises of any size and the *non-profit* private sector referring to NGOs, philanthropies, and other not-for-profits. ⁸⁸ From the setting of technical standards to the organization of humanitarian efforts and distribution of aid via NGOs, private for-profit companies and actors have become highly influential in the formulation and implementation of global public policy. ⁸⁹ Effective governance often involves international cooperation. Government networks are at the heart of international relations because they have the capacity to influence policy outcomes. Robert Keohane and Joseph Nye first discussed this concept and defined different modes of international cooperation. They suggested that intergovernmental networks (IGNs) represent diplomatic interactions that occurr among sovereign states led by the chiefs of governments, while transgovernmental networks (TGNs) occur among sub-state level officials (rather than the heads), and transnational networks (TNNs) occur amongst private actors like non-governmental organizations, businesses, and banks. These actors were involved in informal treaties, which are referred to as "soft law." ⁹⁰

Governance is the continuous process by which multiple political, economic, and social actors coordinate to formulate formal and informal policy actions and forge PPPs. These actions occur on multiple levels (e.g., international, national, regional, and local) and stretch beyond the parameters of traditional government. Government alone cannot solve current global health security problems in an era of heavy cross-border movement of people and food. The following definition, articulated by Drs. Jason Ackleson and Yosef Lapid, best describes the complex structure of governance:

"Policy actions which are the result of a process which involves both formal and informal actions, coordination, and management by different political, economic, and social actors – in addition to governments. These actions occur on multiple levels, such as the international, national, regional, and local." ⁹¹

⁸⁸ Sania Nishtar, "Public-Private 'Partnerships' in Health - a Global Call to Action," *Health Research Policy and Systems* 2, no. 1 (2004).

⁸⁹ Held and McGrew, Governing Globalization: Power, Authority, and Global Governance.

Eilstrup-Sangiovanni, "Varieties of Cooperation: Government Networks in International Security." pp195-200
 Personal communication with Dr. Jason Ackleson. Washington D.C., June 2010.

According to the definition, governance encompasses regulations and norms that have the potential to address international problems. This problem-solving ability is distributed among various actors, including state authorities, intergovernmental organizations, non-governmental organizations, private sector entities, other civil society actors, and individuals in the general public. 92 Both national and international initiatives have emphasized governance reform. Each movement for reform has established a set of criterion for good governance, and most are based on the needs and agendas of their formulators. Many different international agencies have created their own definitions of good governance. According to the definition of the United Nations, governance should exhibit the following characteristics: consensus oriented, rule abiding, participatory, responsive, efficient, and equitable. 93 In 1996, the International Monetary Fund declared that "promoting good governance in all its aspects, including by ensuring the rule of law, improving the efficiency and accountability of the public sector, and tackling corruption, are essential elements of a framework within which economies can prosper."94 The IMF proposes that ineffective governance causes corruption within national economies. The United Nations Development Program (UNDP) defines governance as the exercise of political, economic, and administrative authority to manage a nation's affairs. It is the collection of complex mechanisms, processes, and institutions through which citizens and groups articulate their interests, exercise their legal rights and obligations, and mediate their differences. As mentioned earlier, it is a tedious task to arrive at a single universal definition for governance. The way the concept has been interpreted varies substantially among various international organizations and experts.

⁹²Buse, Hein, and Drager, Making Sense of Global Health Governance: A Policy Perspective. P 341 The glossary of this book offers a very good understanding of the terms governance, global governance, and global health partnerships. This statement is from the glossary which explains and reiterates the importance of a collaborative governance structure.

93 UNESCAP, "What is Good Governance?."(2009)

⁹⁴ International Monetary Fund-public affairs, "The IMF's Approach to Promoting Good Governance and Combating Corruption — A Guide," http://www.imf.org/external/np/gov/guide/eng/index.htm.

Table 3. List of definitions of governance from experts and international organizations

Source	Definition
UNDP	Governance is viewed as exercise of economic, political, and administrative authority to manage a country's affairs at all levels. It comprises mechanisms, processes, and institutions through which citizens and groups articulate their interests, exercise their legal rights, meet their obligations, and mediate their differences. 95
World Bank	Governance is defined as the manner in which power is exercised in the management of a country's economic and social resources. 96
USAID	Governance is defined as the ability of government to develop an efficient, effective and accountable public management process that is open to citizen participation and that strengthens rather than weakens a democratic system of government. ⁹⁷
OECD	Governance denotes the use of political authority and exercise of control in a society in relation to the management of its resources for social and economic development. 98
Institute of Governance, Ottawa	Governance comprises the institutions, processes, and conventions in a society which determine how power is exercised, how important decisions affecting society are made and how consensus is reached on various interests. ⁹⁹
International Institute of Administrative Sciences	Governance refers to the process whereby elements in society wield power and authority, and influence and enact policies and decisions concerning public life, and economic and social development. It involves interaction between these formal institutions and those of civil society. ¹⁰⁰

UNDP, Governance for Sustainable Human Development (New York,: UNDP, 1997). P2-3
 World Bank, Governance: The World Bank's Experience (Washington D.C.: The World Bank, 1994). P14

⁹⁷ USAID, "Office of Democracy & Governance: Governance," USAID,

http://www.usaid.gov/our_work/democracy_and_governance/technical_areas/dg_office/gov.html.

⁹⁸ Organisation for Economic Co-operation and Development. Development Assistance Committee (OECD), Participatory Development and Good Governance (Paris: OECD, 1995). P14

99 Ottawa Institute of Governance, "Our Approach," http://iog.ca/en/about-us/our-approach.

Weiss, "Governance, Good Governance and Global Governance: Conceptual and Actual Challenges." Pg 797

IMF	Governance encompasses purposes limited to economic aspects of governance in improving the management of public resources, supporting the development and maintenance of a transparent and stable economic and regulatory environment conducive to private sector activities. ¹⁰¹
James Rosenau	Governance concerns the manner through which a society or organization "steers" itself to achieve common goals. 102
Ackleson-Lapid	Policy actions which are the result of a process which involves both formal and informal actions, coordination, and management by different political, economic, and social actors – in addition to governments. These actions occur on multiple levels, such as the international, national, regional, and local. ¹⁰³

Shift in governance structures in global public health

The world is witnessing "a remarkable expansion of collective power" that is highly disaggregated and unevenly spread, but still brings innovation. Several factors have encouraged this global shift in governance. The end of the Cold War was one of the main contributory factors to this phenomenon. After the Cold-War period, the deadlock that existed in the UN and its associated agencies began to dissolve. The resolution of conflicts between states, as well as reconstruction and development, topped the UN priority list following the war. What emerged, therefore, was a system of interstate organizations dedicated to resolving conflicts and supporting development collaboration. Globalization led to increased demand for multilateralism, transnational cooperation, financial stability, and standard setting in internationally relevant sectors. With the absence of an ultimate authority and the presence of fragmented distribution of authority, there was new found flexibility, as well as room for innovation and experimentation, in the process of development and the application of control mechanisms in the health sector. There has been a noticeable power shift in global health,

¹⁰¹ IMF, "The Role of the IMF in Governance Issues: Guidance Note," http://www.imf.org/external/pubs/ft/exrp/govern/govindex.htm.

Rosenau, "Governance in the Twenty-First Century." Pg 14

¹⁰³ Personal communication with Dr. Jason Ackleson. Washington D.C., June 2010.

¹⁰⁴ T.J. Sinclair, Global Governance: Critical Concepts in Political Science (New York: Routledge, 2004). Pg 184

¹⁰⁵ Held and McGrew, Governing Globalization: Power, Authority, and Global Governance. Page: 8

¹⁰⁶ Global Health Europe, "Global Governance," available at http://www.globalhealtheurope.org. (2009)

¹⁰⁷ Rosenau, "Governance in the Twenty-First Century." P 123-124

increasing the influence of non-state actors in many departments, especially in that of global policy-making. The emergence of public-private partnerships for health (PPPH) is the result of a range of complex factors: advances in science and technology, growth in the pharmaceutical industry, changes in the global framework of health governance, and the multilateral system. The concept of governance has evolved over time and adapted to the changing global scenario. See table 4 for details.

Table 4. Historical evolution of the concept of governance

Year	Concept of governance	
Pre-1970s	 authority on a national level system limited to inter-state relationships and exclusion of new powers/actors focus on government, public service as the motor for economic and social development 	
1980s	 emergence of new powers like the IGOs, NGOs focus on development and management, free-market reforms measures aimed at reducing both budget and trade deficits incorporation of state leadership in development process 	
1990s	 expansion to include civil society, and private players emphasis on democratic processes and values privatizing of state businesses, and opening of borders to the flow of international trade and finance multilateral approach to economic and social development and efforts to combat threats to peace, health, and security 	

Source: Adapted from "Developing Capacity for Effective Governance." UNDP, available at www.undp.org.

Prior to the late 1970s, partnership between the private and public sectors were virtually non-existent did not exist within the UN or any other international development organization. 108 The few discrete partnerships involved donor agencies and recipient country governments. In the late 1960s and early 1970s, flaws began to appear in the economic growth theories of various developing countries, and it became increasingly evident that modernization efforts were failing to tackle the poverty that was so obviously leading to various global health issues. By the early 1980s, influential international organizations acknowledged and campaigned for a greater role for the private sector. Donors started to look beyond their original roles and began to form broader relationships, taking up new responsibilities. ¹⁰⁹ Some experts have chosen to arrange the history of global health governance over three periods: the 1970s to mid-1980s, the mid-1980s to 1990s, and the mid-1990s to 2000s. The first period is characterized as the era of primary healthcare, the second period as that of health reforms, and the third period as the era of global partnerships. 110,111 The 1970s was the era of biotechnological revolution. Newly produced vaccines produced had great potential to improve the immunization status in the Third World. However, public funding went only to basic research and only private companies invested in the development of high-quality, novel, and expensive vaccines and products. Thus, in order to gain high returns, these companies limited their focus to the developed market and did little to resolve the issues of public health in the developing world. During the 1990s, industry began to recognize the potential benefits of alliances with the UN and other intergovernmental groupings. Industry embarked upon a strategy to gain access to and influence the multilateral decisionmaking process. One major outcome of the industry effort is a joint statement by the UN and the ICC (International Chamber of Commerce) in 1998. It proposed that "broad political and economic changes have opened up new opportunities for dialogue and cooperation between the UN and the private sector." The focus areas included establishing an effective regulatory framework for globalization and raising the productive potential of poor countries by promoting

¹⁰⁸ Buse and Walt, "Global Public-Private Partnerships: Part I-A New Development in Health?." p550

¹⁰⁹ Don Babai, "The World Bank and the IMF: Backing the State Versus Rolling It Back," in *The Promise of* Privatization: a Challenge for U.S. Policy, ed. Raymond Vernon (New York: Council on Foreign Relations, 1988). p254-85 ¹¹⁰ Buse, Hein, and Drager, *Making Sense of Global Health Governance: A Policy Perspective*. p48-56.

¹¹¹ K Abbasi, "The World Bank and World Health: Changing Sides," British Medical Journal (Clinical research ed.) 318, no. 7187 (1999).

private-sector involvement. The creation of PPPs is also attributed to the disease burden in the developing world, especially in the late 1980s. The HIV/AIDS epidemic was a major contributing factor, as was the reemergence of diseases such as tuberculosis and chloroquinone-resistant malaria. By the early 1990s, many manufacturers had stopped producing the less profitable vaccines (ones used in the Third World), preferring to focus on meeting wealthier nations' demands for the newer and more expensive ones. This product divergence affected both availability and price of the medicines and vaccines. Thus, partnerships were required to modify their market strategies and make deals with the private sector. 113

Realizing the gravity of the situation, Gro Harlem Brundlandt, former Director-General of the WHO, made one of the most relevant comments of the 1990s pertaining to the global health scenario:

"...Partnership is what is needed in today's world, between government and industry, producers and consumers, between the present and the future. We need to build new coalitions...We must agree on a global agenda for the management of change...We must continue to move from confrontation, through dialogue to cooperation...Collective management of the global interdependence...is the only acceptable formula in the world of the 1990s." 114

Significance of governance in global public health

Health governance involves the actions and means by which an organization or society promotes the protection of a population's health. This organization may be formal or informal, and the mechanisms it uses may occur at local, regional, national, and international levels, involving public or private sectors (or a combination of both). Disease among the world's poorest people is an enduring reality and the profound disparities in health and life expectancy

¹¹³ B Bull and Desmond McNeill, *Development Issues in Global Governance: Public-Private Partnerships and Market Multilateralism* (New York: Routledge, 2007). p68-72

¹¹² Lee, Buse, and Fustukian, *Health Policy in a Globalising World*.

¹¹⁴ L. Lohmann, "Whose Common Future?," *Ecologist* 20, no. 3 (1990). See page 82. It is ironic that this statement comes from the director-general of an organization which was apprehensive of embracing the concept of PPPs and formal-informal policy actions.

¹¹⁵ Richard Dodgson, Kelley Lee, and Nick Drager, "Global Health Governance A Conceptual Review," in *Key Issues in Global Health Governance* (Geneva: World Health Organization and London School of Hygiene and Tropical medicine, 2002).

Buse, Hein, and Drager, Making Sense of Global Health Governance: A Policy Perspective.

between the rich and the poor are resistant to change. 117 Health system governance concerns the actions and means adopted by a society to organize itself in the promotion and protection of its population's health. 118 Conveniently, health can be considered to be both a source and a product of economic development; however, this fact puts both governmental and nongovernmental actors in the position of having to actively participate in public health initiatives. ¹¹⁹ This value of investing in public health has gained momentum, and it is now considered to be a core criterion of "good governance." 120

The last decade has witnessed increased efforts to tackle the developing world's diseases. Indeed, it has become a key feature in the foreign policy stances of many nations. The reasons for this shift are numerous. Some regard this newfound focus as the moral duty or a philanthropic responsibility of the developed world; essentially, to whom much has been given, much is required. Others regard the shift as a selfish investment on the part of developed countries to indirectly protect their own citizens from disease threats (since microbes do not respect borders). 121 More and more people from diverse backgrounds—even celebrities and high ranking political figures—are pouring money and resources into global health improvement, not only for philanthropic reasons, but also for political gain. The conspicuous voids left by the traditional governance system in the face of global health crises have prompted the creation of various initiatives; some of these are sponsored multilaterally, while others are sponsored by non-state actors such as nongovernmental organizations (e.g., humanitarian organizations, industry associations, foundations and other private associations) and businesses (e.g., pharmaceutical companies). In some cases, states and intergovernmental organizations are attempting to address global health problems by joining forces with non-state actors to form public-private partnerships (PPPs or "hybrid" organizations). Examples of such partnerships include the Global Fund for HIV/AIDS, tuberculosis and malaria (also known as "The Global

¹¹⁷ Lawrence O. Gostin and Emily A. Mok, "Grand Challenges in Global Health Governance," *British Medical* Bulletin 90, no. 1 (2009). p7-18.

¹¹⁸ Siddiqi et al., "Framework for Assessing Governance of the Health System in Developing Countries: Gateway to Good Governance." p14

¹¹⁹ Daniel Tarantola, "Global Health and National Governance," American Journal of Public Health 95, no. 1

¹²⁰ Kelley Lee Richard Dodgson, Nick Drager, "Global Health Governance A Conceptual Review," in Key Issues in Global Health Governance (Geneva: World Health Organization and London School of Hygiene and Tropical medicine, 2002).

121 Laurie Garett, "The Challenge of Global Health," *Foreign Affairs* 2007.

Fund")¹²², the International Finance Facility for Immunization, and other organizations.¹²³ Taking into consideration the health challenges that the world continues to confront, impressive innovation in governance has come about through international response to these problems. One such innovation is the widespread development of PPPs.

Polycentric distribution is a primary characteristic of contemporary global health governance. Today's global health governance structure is confronted with six "grand challenges" that are vital to the improvement of world health and the reduction of health disparities. These challenges include: 124

- 1. the need for collaboration and coordination of multiple players;
- 2. the lack of global health leadership;
- 3. the need to harness creativity, energy and resources for global health;
- 4. the neglect of basic survival needs;
- 5. the lack of funding and priority setting; and
- 6. the need for accountability, transparency, monitoring, and enforcement of health regulations and standards.

It is important to note that all of these challenges are interconnected and, in some instances, overlapping. Thus, a focused and well-rounded approach is necessary to appropriately and adequately address these issues as part of today's global health agenda. The definition of governance forth by Ackleson-Lapid will probably offer effective solutions to these challenges. One of the essentials for resourceful governance is believed to be the building of and working through PPPs or GPPPs. PPPs, which were formalized in the early to mid-1990s as a central feature of international health, have been portrayed as an opportunity to expand funding and improve efficiency in international health efforts. This has allowed PPPs to

32

 $^{^{122}}$ The Global Fund to Fight AIDS Tuberculosis and Malaria, "A New Partnership," The Global Fund, $http://www.theglobalfund.org/en/partnership/?lang=en. \ The$

Lawrence O. Gostin and Emily A. Mok, "Grand Challenges in Global Health Governance," *British Medical Bulletin* 90, no. 1 (2009). See page: 8. The Global Alliance for TB Drug Development involving Glaxo SmithKline, Medicines for Malaria Venture is a good example of an activity-focused partnership. Global Program to Eliminate Lymphatic Filariasis is an example of outcome-oriented partnership.

¹²⁴ L. O. Gostin and E. A. Mok, "Grand Challenges in Global Health Governance," *British Medical Bulletin* 90, no. 1 (2009).

¹²⁵ Lawrence O. Gostin and Emily A. Mok, "Grand Challenges in Global Health Governance."(2009). p8-9

¹²⁶ The definition offers a solution to the current global public health scenario which is amidst the challenges of a sinking economy and rapid spread of diseases.

¹²⁷ Buse, Hein, and Drager, Making Sense of Global Health Governance: A Policy Perspective.

influence the public health agenda and lend legitimacy to corporations' activities through association with UN agencies. The World Bank is now the largest multinational development agency, providing an average of US \$2 billion per year for health programs. Many private forprofit organizations have come to recognize the importance of public health goals for their immediate and long-term objectives, and they have come to accept a broader view of social responsibility as a part of their corporate mandate. Many pharmaceutical companies are now involved in a number of drug donation programs based on partnerships with the WHO, UNDP, and other organizations. ¹²⁸

A good working definition for PPPs includes three points. First, these partnerships involve at least one private for-profit organization and at least one not-for-profit organization. Second, the core partners have joint shares in both the efforts and rewards. Finally, partnerships in public health are committed to the sustained maintenance of social value (improved health), especially for disadvantaged populations. The portfolio of UNFIP, which is broadly representative of the UN-supported public-private initiatives, indicates that roughly 43% of UNFIP funding was allocated for health programs, about 25% for environmental partnerships, and 21% for women's rights and population partnerships. A GPPP for health is defined as a collaborative relationship that transcends national boundaries and brings together at least three parties, including a corporation (and/or industry association), an intergovernmental organization, and civil society. Together, these parties work to achieve a shared health-creating goal on the basis of a mutually agreed division of labor. Thus, it can be said that it is imperative to embrace PPPs. While collaborating, the main point to be emphasized is the "win-win" outcome for both parties. For multilateral organizations and federal authorities, partnership with the private sector seems to: 132

- 1. bestow more business credibility and authority,
- 2. extend increased resources available, and
- 3. facilitate access to private sector skills and management talents.

¹²⁸ Michael Reich, James E Austin, and Kent Buse, *Public-Private Partnerships for Public Health*, ed. Michael Reich, Harvard Series on Population and International Health (Harvard University Press, 2002). p2-7

¹²⁹ Reich, "Public-Private Health Partnerships for Public Health." *Nature Medicine* 6, no. 6 (2000): 617-20.

¹³⁰ UNFIP (United Nations Fund for International Partnerships), "UNFIP Projects," available at http://www.un.org/unfip/2004Website/charts.htm.

¹³¹Reich, "Public-Private Health Partnerships for Public Health." *Nature Medicine* 6, no. 6 (2000): 617-20. ¹³²Ilona Kickbusch and Jonathan Quick, "Partnerships for Health in the 21st Century," *World Health Statistics Quarterly* 68(1998).

For private entities, a partnership with non-state players offers the following: 133

- 1. increased corporate influence in global policy-making,
- 2. improved overall financial benefits through brand and image promotion, and
- 3. enhanced corporate authority and legitimacy through association with the UN and other reputable international bodies.

Transnational partnerships usually involve larger partnerships and complex groupings; depending upon their structure, they may bring together several governments, local and international NGOs, research institutions, and even UN agencies. Such partnerships can be coordinated by different entities. PPPs pool public and private resources, and capitalize on the skills of the respective sectors to improve the delivery of services. The WHO is the initiator of most of these partnerships, and it engages private commercial sector participants such as in the case of Global Alliance for Vaccines and Immunization (GAVI), Roll Back Malaria (RBM), Stop TB partnership (Stop TB), Safe Injections Global Network (SIGN), Global Polio Eradication Program (PEI), the Special Program for Research and Training in Tropical Diseases (TDR), and the Special Program for Research Development and Research Training in Human Reproduction (HRP), among others. Partnerships can be primarily company-owned such as in the case of Action TB and can be legally independent as evidenced by groups such as the International Aids Vaccine Initiative (IAVI), Medicines for Malaria Venture (MMV), the Global Alliance for TB Drug Development (GATBDD), the Concept Foundation (CF), and the Mectizan Donation Program (MDP). The Malaria Vaccine Initiative (MVI) and the HIV Vaccine Initiative (HVI) are a few examples of civil society-initiated partnerships. 134 Global health partnerships (GHPs) have made impressive contributions to international health. These contributions have been particularly commendable in the areas of drug delivery, research and development, and

¹³³Ibid. While marching towards the era of collaborative global governance (that involves private and non-state actors, as well the government), it is important that we donot ignore the probable negative consequences of PPPs. Critics raise a number of relevant questions such as, are partnerships desirable and under what circumstances? What are the appropriate criteria for the selection of candidate companies and industries and who makes these criteria? While dealing with these questions, it is important for the international health organizations and national governments to acknowledge this new trend and not shy away from such partnerships. K. Buse and A. Waxman, "Public-Private Health Partnerships: a Strategy for WHO," *Bulletin of the World Health Organization* 79, no. 8 (2001). pp748-54

^{(2001).} pp748-54

134 Nishtar, "Public-Private 'Partnerships' in Health - a Global Call to Action." GlaxoSmithKline plays a leading role in the Action TB (Advocacy to Control Tuberculosis Internationally) initiative advocates working to mobilize resources to treat and prevent the spread of tuberculosis (TB), a global disease that kills one person every 20 seconds. The initiative was launched in 1993 with £10 million of funding from the company for basic research in academic laboratories to identify new drug targets.

policy-making. In the area of research and development, they have resulted in the invention of new drugs like CoArtem and Lapdap (for malaria), and Impavido (for leishmaniasis). The product access that GHPs such as MDP, Stop TB, and GAVI have to these drugs has proven to be a remarkably effective tool for supplying quality drugs at a reduced cost, as well as for introducing antiretrovirals in many poor countries. One of the main highlights of such a partnership has been the renewed public attention to health issues and the resulting bank of resources being generated to combat communicable diseases. Hence, it is important to acknowledge the emerging global reality characterized by a tripartite relationship among government, nonprofit groups, and the private sector. However, only win-win or mutually beneficial strategies will receive the funding, leadership, and attention necessary for success. ¹³⁵

Partnerships are a type of business model that help in reaching the "bottom of the pyramid," providing goods and services to the poorest people in the world. ¹³⁶ One example of this type of model can be seen in India's state of Uttar Pradesh, where USAID funded a POUZN (Point-Of-Use Water Disinfection and Zinc Treatment) operation called Jal Mitra (friends of water). The underprivileged vulnerable population was targeted and educated to use disinfected (POU) water. ^{137,138} The state government, local NGOs (whom the community trusted), and private companies worked together to distribute the sustainable POU devices. C.K. Prahalad, professor at the Stephen M. Ross School of Business in the University of Michigan, proposed

¹³⁵ C.E. Koop, C.E. Pearson, and M.R. Schwarz, *Critical Issues in Global Health* (San Francisco, CA: Jossey-Bass, 2001).

¹³⁶"Bottom of the pyramid" (hence referred to as b.o.p.) is a term that was coined by Franklin D. Roosevelt, the U.S. president in 1932, about the time when the great depression was affecting the country (and the world at large) adversely. Co-defined by C.K. Prahalad in 1998, B.O.P refers to the common lower-income-group individuals (4 billion people living on less than \$2 a day). The highest earner is placed on top of the pyramid; this tier represents a population with numerous opportunities for employment and is wealthy.

During my summer research visit to D.C. in June, 2010, I got an opportunity to attend a non-profit organization, Global Health Council's annual conference. The conference hosted seminars from wide variety of disciplines—community health, capacity building, governance, PPPs, maternal and child health, and communicable diseases. Camille Saadé, "Leveraging NGO Partnerships to Scale POU Interventions" in *Global Health Council Annual Conference: Goals and Metrics* (Washington D.C.: Global Health Council, 2010). POUZN was designed for point of use (POU) water disinfection with zinc treatment for diarrhea in India. In addition to mobilizing private sector (water purifier companies like Ion Exchange and Tata's) the project combined efforts of the local NGOs and government officials. POUZN is collaborated with the central and state governments, the Indian Academy of Pediatrics, local federation of NGOs, manufacturers of zinc, and the UNICEF to ensure public sector provision of zinc treatment. POUZN has engaged manufacturers in extending the distribution of their products, and brought in micro-finance organizations to provide small loans to their clients (women self-help groups) so that they can purchase the POU water treatment devices. Camille Saadé and Christian Winger, "Point-of-Use Water Disinfection and Zinc Treatment Project (Pouzn)," Academy for Educational Development (AED), http://pshi.aed.org/projects_pouzn.htm.

¹³⁸ Saadé, "Leveraging NGO Partnerships to Scale POU Interventions".

that national governments and businesses should stop looking at these poor segments of the population as victims, but rather as consumers. Entrepreneurial solutions such as these place a minimal financial burden on developing countries. Incorporating multiple levels of cooperation in local, national, and international arenas is another important aspect to be addressed. The essential point is that global health problems require global solutions, and neither public nor private organizations can solve these issues on their own. Embracing this transformed governance structure helps to produce innovative and powerful mechanisms for addressing daunting challenges through the leveraging of ideas, expertise, skills, and resources from different partners. And the segments of the segments of the product of the segments of the se

Conclusion

Globalization has forced the international community to recognize that the forces currently shaping the world are not necessarily restricted to the traditional apparatus of the state; they also encompass international organizations, institutions, private entities, and civil society groups outside of the state. The problems of development are complex, and the search for solutions is a continuing effort on the part of national governments and non-governmental actors alike. The concept of governance has evolved over the last 50 years due to the different theories and ideas that have played a role in configuring the contemporary world. The change in governance structures over time can be attributed to the lack of efficiency on the part of the public sector and international organizations. Since the 1970s, important changes have taken place in international health governance. Technological advances, the rise of new and reemerging diseases, and a lack of public funding are some of the factors that have necessitated involvement of non-state actors in the global health system. The current global governance structure has proven to be a way of successfully building and engaging multi-layered perspectives and networks. Inadequate funding and the complicated nature of bureaucracy have

¹³⁹ Kent Buse and Andrew M. Harmer, "Seven Habits of Highly Effective Global Public-Private Health Partnerships: Practice and Potential," *Social Science & Medicine* 64, no. 2 (2007).

¹⁴⁰ Reich, Austin, and Buse, *Public-Private Partnerships for Public Health*. Conflict of interests and fear of increased fragmentation of international cooperation haunts such partnerships. Amidst all the hype surrounding PPPH, it is important to acknowledge that the rules of the new governance structure are ambiguous. No single success formula exists. It thus requires substantial effort, strategy analysis, cooperation, and risk taking by all the players participating in a new partnership.
¹⁴¹ G. Shabbir Cheema and UNDP, "UNDP and Governance: Experiences and Lessons Learned," (New York:

¹⁴¹ G. Shabbir Cheema and UNDP, "UNDP and Governance: Experiences and Lessons Learned," (New York: United Nations Development Programme, 2006).

limited the abilities of many national governments and international institutions to provide good public health services—a reality that has contributed to the contemporary form of governance. This shift to other forms of governance like partnerships, coalitions, and informal collaborations can be further analyzed through a study of a multilateral health organization like the WHO, which will be accomplished in the next chapter. PPPs assist the government financially and provide human resources. Private sector businesses are lured into these partnerships by public sector offerings of subsidies or incentives. Such partnerships also help in the production and distribution of health-related products to every possible corner of the world. The Ackleson-Lapid definition of governance proposes sharing of decision-making and responsibilities of health among governments, multilateral institutions, civil society, and the private sector. Both the public and private sectors have unique roles to play in addressing and overcoming the challenges of maintaining and sustaining effective international health systems. The three essential elements put forth by Ackleson and Lapid can be effective instruments for strengthening these health systems.

¹⁴² Some critics argue that PPPs will fragment international cooperation. It will result in stronger regulations and restriction not being levied on the private sector. Thus, private sector services might be inconsistent and uncoordinated. Critics of partnerships also question the assumption of equal power relations in collaborative initiatives. For example Global Health Council, "Understanding Private Actor Involvement in Health Systems," (Washington D.C.: GHC, 2009). R. Widdus, "Public-Private Partnerships for Health Require Thoughtful Evaluation," *Bulletin of the World Health Organization* 81, no. 4 (2003).

¹⁴³ Richardson and Allegrante, "Shaping the Future of Health through Global Partnerships."

Chapter 3 - History of international cooperation in public health and the role of governance

The pre-WHO era

The influenza pandemic of 412 BC, the plague of Athens in 430 BC, the Black Death in the 14th century, and the transatlantic exchange of infectious diseases following Columbus' contact with the new world in 1492 were all historically significant events that presented major challenges to the prevention and control of disease spread across continents. 144 By the 18th century, epidemics were more isolated and scattered. Many technologies, such as steam power and railways that arose during the Industrial Revolution in the 19th century, made international travel an accessible reality. During the same period, waves of communicable diseases swept across Europe. The European imperialism in the 19th century, joined by similar expansion efforts on the part of the US and Japan, led to large-scale movement of people and capital. This also led to nations becoming more integrated. This integration, which came about as a result of quicker and easier travel, was characterized by a swell in international trade and the unprecedented widespread mingling of different populations. 145 The 1918 influenza pandemic disrupted trade and public health to a large extent, killing approximately 25 million people worldwide. Public health cooperation only a little later in the 19th century. It was initiated by the creation of international health institutions in 1838 and was followed by a succession of International Sanitary Conferences from 1851 up to the eventual drafting of sanitary conventions. 146

The increased speed and movement via transportation was a stimulus for international trade, but it also resulted in rapid and extensive spread of epidemics like cholera. The Industrial Revolution also resulted in crowded living conditions which were a breeding ground for diseases. These factors caused state officials and physicians to begin contemplating how cross-border cooperation could benefit the security of health. With greater interconnectivity, an

¹⁴⁴ Columbian exchange describes the interchange of plants, animals, and diseases between the Old World and the Americas following Columbus's arrival in the Caribbean in 1492. A.W. Crosby, *The Columbian Exchange: Biological and Cultural Consequences of 1492* (Praeger, 2003).

¹⁴⁵ Anne-Emanuelle Birn, Yogan Pillay, and Timothy Holtz, *Textbook of International Health: Global Health in a Dynamic World*, 3rd ed. (New York: Oxford University Press, 2009).

¹⁴⁶ Neville M. Goodman, *International Health Organizations and Their Work* (London: Churchill, 1971).

individual country's health issues posed a real threat to the health of other countries' populations. The European nations were wise to begin considering the benefits of cross-border cooperation in the realm of health security, because lack of global public health security can impact a nation's political stability, trade, tourism, and access to goods and services. There were outbreaks of cholera in London in 1831, 1848-49, and in 1866. 147 In 1832, the cholera pandemic caused 21,000 deaths in Paris alone, just 7 months after the disease had arrived from England. It was through cholera epidemics that epidemiologists finally discovered the link between sanitation and public health, a discovery that provided the impetus for water and sewage system improvements. Over the first half of the 18th century, progress in international public health was limited to minimizing hindrances to trade and transport, as well as developing Europe's public health defense mechanisms for preventing the spread of cholera. The book Airs, Waters, and *Places*, written in the 5th or 4th century BC, by Hippocrates, shows the first evidence of a systematic attempt to establish the existence of a causal relationship between human diseases and the environment. 148 The 19th century featured the creation of four regional health institutions to regulate implementation of quarantine measures in the Mediterranean region: Conseil Superieur de la sante de Constantinople (1839), Counseil sanitare, maritime et quarantenaire d'Alexandrie (1843), Conseil sanitaire de Tanger (1840), and that of Tehran (1867). However, the first International Sanitary Conference (ISC), attended by the 12 governments, was not held until 23 July 1851.¹⁵⁰

Between 1851 and 1938, fourteen International Sanitary Conferences were held, laying the foundation for broader international cooperation. The ISCs are a historical example of the

¹⁴⁷ Post the recurring cholera disease outbreaks, the Public Health Act of 1848 was passed in England due to the urges by Edwin Chadwick, a socialist who focused on reforming public health and sanitation laws in England. The purpose of the Act was to promote public health in England. It established a general health board for improving sanitary conditions of towns and populace places in England and Wales. Although the act was written before the sciences of bacteriology and pathology were established, it had good work on mortality and morbidity rates across the country. Advances in public health in England had a strong influence in United States, France, and Germany too. K. Calman, "The 1848 Public Health Act and its Relevance to Improving Public Health in England Now," *British Medical Journal* 317, no. 7158 (1998).

¹⁴⁸ Hippocrates, "Air, Waters, and Places," in *Encyclopedia Britannica* (2011). http://www.britannica.com/EBchecked/topic/10900/Air-Waters-and-Places. The new sciences of bacteriology and immunology emerged in the 17th century; this book provided the primary theoretical basis for understanding endemic and epidemic disease.

¹⁴⁹ Y Beigbeder et al., *The World Health Organization* (Dordrecht, Netherlands: M. Nijhoff, 1998). They were councils having representatives from the European powers and the Islamic countries.

¹⁵⁰ WHO, "International Sanitary Conferences." In *The First Ten Years of the World Health Organization*. Geneva 1958. p3-14. The twelve nations included: Austria, the Kingdom of the Two-Sicilies, Great Britain, Greece, Spain, France, the Papal States, Portugal, Russia, Sardinia, Tuscany, and Turkey.

presence of trans-governmental networks in the realm of public health security. The representatives who attended the conferences included not only the chiefs of government, but also lower-level officials, physicians, and sanitary authorities. These delegates were then responsible to report the decisions made at the conferences to their governments for implementation. There were no treaties or formal agreements signed at the ISC; their functionality relied on governments' cooperation by adopting the policies discussed.¹⁵¹ Thus, the need for transnational governance and involvement of professionals from all fields of expertise was noted. A draft convention was signed in 1852 concerning plague, yellow fever, and cholera. In 1892, the ISC agreed to set out quarantine and hygiene practices. It defined quarantine regulations for all ships coming into Mediterranean through the Suez Canal. The 7th conference at Dresden (held in 1893) required all signatory states to notify one another of any outbreak of cholera within their boundaries. This move reduced inland quarantine measures between states. The third and fourth conventions, signed in 1884 and 1887 respectively, dealt with plague quarantine regulations for those on pilgrimages to Mecca. ¹⁵² The four Sanitary Conventions were agreed upon by 1903, and were later codified and formatted into the International Sanitary Regulations, the forerunner of the current International Health Regulations. ¹⁵³ The highlight of the 1903 convention was the discussion of the three major epidemic diseases of the time cholera, plague, and yellow fever. This conference was a landmark in the field of scientific study of epidemic diseases.

The 5th ISC (held in 1881) in Washington had recommended the adoption of a draft convention to create an international agency dealing with health questions on a regular basis. The agency would also aid in promoting studies on epidemics and help with the implementation of quarantine measures and the periodic holding of ISCs. The 1902 meeting of delegates of the sanitary conferences created the Pan American Sanitary Bureau (PASB). The functions of the PASB included the exchange of epidemiological information, the dissemination of data on health, the provision of assistance in fighting epidemics, and the improvement of sanitation of

¹⁵¹ Ibid. p 3-14.

¹⁵² Amy L. S. Staples, *The Birth of Development: How the World Bank, Food and Agriculture Organization, and World Health Organization Changed the World, 1945-1965* (Kent, Ohio: Kent State University Press, 2006). p128-130

¹⁵³ Valeska Huber, "The Unification of the Globe by Disease? The International Sanitary Conferences on Cholera, 1851-1894," *The Historical Journal* 49, no. 2 (2006).

harbors and cities.¹⁵⁴ The French government proposed an international health office. This proposal was favorably received, and on 9 December 1907, a permanent body, the Paris-based Office International d'Hygiene Publique (OIHP) was created to collect and report epidemiological data from its member states.¹⁵⁵ The office helped to disseminate information on communicable diseases and information that would be of general public health interest. During the World War I, the OIHP reduced its activities, but continued to publish a bulletin. The bulletin dealt mainly with war-related problems such as infected wounds, gangrene, cutaneous parasites, and tetanus. Early in 1920, a plan for a permanent international health organization was approved by the League of Nations. The OIHP, however, was unable to participate in an interim combined League-OIHP committee. This was partly because the US, which was not a member of the League, wished to remain in the OIHP but could not if the OIHP were absorbed into a Leagueconnected agency. The OIHP existed for another generation, maintaining a formal relationship with the League of Nations. The next major development was the creation of League of Nations Health Organization (LNHO) in 1923, which was part of the parent organization, the League of Nations. 156 Set up in 1920 in the aftermath of the World War I, the League of Nations was backed by a number of prominent men and women, including the United States' President Woodrow Wilson, who argued that the Treaty of Versailles—which ended World War I—should include provisions setting up a peace-keeping body to police international affairs. These provisions eventually became the Covenant of the League of Nations. However, the League's powers were limited. The absence of the United States weakened it from the outset. 157 The LNHO conducted studies on rural hygiene, primary health education, biological standardization, nutrition, malaria, TB, leprosy, syphilis, rabies, and cancer. The conference met in New York and on 22 July 1946 adopted a constitution for the World Health Organization, which would

http://avalon.law.yale.edu/20th_century/leagcov.asp.

 ¹⁵⁴ Pan American Health Organization (PAHO) was declared the regional office of the WHO after a meeting between the PASB and WHO on 24 May 1969. PASB retains its identity and functions within PAHO.
 ¹⁵⁵ Beigbeder et al., *The World Health Organization*. The agreement was signed on by 12 Member States Belgium, Brazil, Egypt, France, Italy, the Netherlands, Portugal, Russia, Spain, Switzerland, the UK, and the US.
 ¹⁵⁶ The League of Nations came into being after the end of World War One. The League of Nation's task was to ensure that war never broke out again. The functions included preventing war through collective security, disarmament, and settling international disputes through negotiation and arbitration. Yale Avalon Project and Yale Law School, "Covenant of the League of Nations," Lillian Goldman Law Library, available at

League of Nations Library at Geneva, League of Nations 1920-1946: Organization of Accomplishments: A Retrospective of the First International Organization for the Establishment of World Peace (New York and Geneva: United Nations, 1996). The irony is that despite the President's efforts, the U.S Senate refused to ratify America's membership of the League of Nations.

carry on the functions previously performed by the League and the OIHP.¹⁵⁸ Thus, there were three major health organizations operating almost simultaneously in different parts of the world, a situation that eventually led to overlapping of ideas and inter-organizational rivalry.

The transition in international health cooperation can be summarized over four periods: 159

- 1. The Industrial Revolution of the late 18th and mid 19th century, when the first ISCs came into existence.
- The period between both the World Wars, with the establishment of international
 organizations such as the PASB, the OIHP, the League of Nations (LN), and also
 the rise of private American foundations like the Rockefeller Foundation and the
 Red Cross Society.
- 3. The post World-War II era, highlighted by the birth of the WHO.
- 4. The more recent periods starting from the 1980s, which have witnessed the proliferation of new players (both state and non-state) in global public health initiatives, in the area of disease prevention, and health policy-making. The involvement has been seen at all levels from domestic to national to international.

History and creation of the WHO

The 20th century promised a healthier future in many ways. It witnessed advances in medicine, sanitation, hygiene, and public health. The WHO came into existence after World War II, when the victorious powers came together to create an international health organization to produce health for all and assist new governments in building healthier nations. ¹⁶⁰ It has been more than 60 years since the establishment of the WHO, and the organization is regarded as a landmark development in international cooperation post World War II. This thesis, written in response to widespread criticism of the WHO's inefficient governance structure, reviews the history and creation of the organization. Considering the organization's journey from being an undisputed leader in international health to an entity now trying to regain its authority, the WHO makes for an interesting case study in the arena of global public health.

¹⁵⁸ N. M. Goodman, "International Health Organizations and Their Work," *Southern Medical Journal* 46, no. 7 (1953).

¹⁵⁹ Buse, Hein, and Drager, Making Sense of Global Health Governance: A Policy Perspective.

¹⁶⁰ A.F. Cooper, J.J. Kirton, and T. Schrecker, *Governing Global Health: Challenge, Response, Innovation* (Ashgate, 2007).

When the United Nations was formed in 1945, there was a significant need for organizations that would take charge of globally relevant matters such as health, trade, and labor. In 1945, the delegates of a UN conference in San Francisco decided to establish an international health organization with the Economic and Social Council (ECOSOC). 161 In 1946, this council nominated a Technical Preparatory Committee to draft proposals for the upcoming International Health Conference. The committee included members from PASB, LNHO, OIHP, and the United Nations Relief and Rehabilitation Administration (UNRRA). It recommended that OIHP be merged with this new organization. 162 Thus, on 19 June 1946, the International Health Conference in New York agreed upon the new international health organization, calling it the World Health Organization (WHO). The conference had delegates from the 5 UN member states, as well as 16 non-UN member states (invited as observers), 3 Allied Control Commissions, and several international non-governmental organizations. 163,164,165 An interim commission was set up to transfer powers and prepare for the first World Health Assembly (WHA). The WHO was founded shortly afterward and its constitution came into force on 7 April 1948, a date that is now annually celebrated as the "World Health Day." Dr. Brock Chisholm was appointed as the first Director-General of the WHO. Within the UN, the WHO is categorized as one of the specialized agencies with an office located within the UN headquarters. This demonstrates the interlinked nature of global health with global peace. 166 Since its foundation, the objective of the WHO has been to ensure access to health services to people around the globe that will enable them to lead socially and economically productive lives.

The constitution at the outset mandated the WHO to serve as a specialized agency of the UN for global health matters. The WHO is composed of three main operating bodies: the World Health Assembly (WHA), an Executive Board of health specialists (elected for three-year terms

¹⁶¹ ECOSOC, established under the United Nations Charter, is the principal organ to coordinate economic, social, and related work of the 14 specialized UN agencies, functional commissions and five regional commissions. It functions as a central forum for discussing international economic and social issues and for formulating policy recommendations addressed to the member states and the United Nations system.

¹⁶² Beigbeder et al., *The World Health Organization*.

¹⁶³ Afghanistan, Albania, Austria, Bulgaria, Finland, Hungary, Iceland, Ireland, Italy, Portugal, Romania, Siam, Sweden, Switzerland, Transjordan, and Yemen were non-member states invited as observers.

¹⁶⁴ Norman Howard-Jones, *International Public Health between the Two World Wars: The Organizational Problems*, vol. 32 (Geneva: World Health Organization, 1978).

¹⁶⁵ FAO, ILO, OIHP, PASB, UNESCO, UNRRA, League of Red Cross Societies.

¹⁶⁶ Srimathy Vijayan, "A World Health Organization Primer," Medscape General Medicine 9, no. 4 (2007).

by the assembly), and a Secretariat, headed by the Director-General. 167 The regional offices of the organization are headquartered in Alexandria (Egypt), Brazzaville (Congo), Copenhagen (Denmark), Manila (Philippines), New Delhi (India), and Washington, D.C. (USA). Membership in the organization is open to all nation states, and member countries of the UN may become members of the WHO by signing an agreement accepting the WHO constitution. Other countries may be admitted as members when their application has been approved by a simple majority vote of the WHA. At the first WHA, which took place on 24 June 1949, 48 members were present. As of 2011, there are 193 member states. The WHA, as the principal organ of the WHO, is composed of delegates from all member states. It determines the organization's policies, approves the budget, and plays a supervisory role over the organization's programs and projects. Since the WHO's establishment, the WHA has been involved with conducting research by setting up its own institutions and by cooperating with both official and non-official institutions of member states. The first WHA gave direction to the future orientation of the organization's activities. 168 The WHO sets up collaborating centers designated by the Director-General to form part of an international collaborative network carrying out activities in support of the organization's programs at all levels. The function of these centers include collection and dissemination of information; standardization of terminology, nomenclature, technology, and diagnostic procedures; research training; coordination of activities carried out several institutions on a given subject; and participation in collaborative research developed under the leadership of the WHO. 169 Programs in the WHO were grouped in order of importance. Malaria, maternal and child health, TB, venereal diseases, environmental sanitation, and nutrition belonged to the "top priority class." Second class status was given to public health administration, third to parasitic diseases, fourth to viral, and fifth to mental diseases. 170

One of the first challenges for the WHO after it came into force in 1948 was the replacement of existing quarantine and sanitary rules with the International Sanitary Regulations, developed in 1951. Following the addition of some new material to this 1951 agreement, it was

¹⁶⁷ J. Charles, "Origins, History, and Achievements of the World Health Organization," *British Medical Journal* 2, no. 5600 (1968).

¹⁶⁸ Kelley Lee, World Health Organization (WHO) (New York: Routledge, 2009).

¹⁶⁹ World Health Organization, "Basic Documents," (Geneva: WHO, 1983). A department or laboratory within an institution or group of facilities for reference, research or training belonging to different institutions may be designated as a collaborative centre.

¹⁷⁰ WHO, "The First Ten Years of the World Health Organization," (Geneva: World Health Organization, 1958). P73

renamed the International Health Regulations (IHR) in 1969. The IHR were promulgated by the WHO under Article 21 of its 1951 constitution, and according to the WHO, they constituted the "only international health agreement on communicable diseases that is binding on the (WHO)."¹⁷¹ The member states were obliged to notify the WHO of any incidences of cholera, plague, or yellow fever. Health organizations were required to work in tandem with surveillance operations to achieve maximum security against the international spread of disease. 172 The IHR had its set of fierce criticism, and was labeled the "toothless sleeping treaty." After several deliberations and discussions, the agreement was revised in 2005, to make it more relevant in today's global public health situation. The revised regulations seek to strengthen national health systems by producing more robust health governance, both horizontally (among states) and vertically (within the epidemic-prone diseases). The WHA's Resolution 54.14, "Global health security: epidemic alert and response," linked the health security concept to a global strategy for the prevention of movement of communicable diseases across national borders. This 2001 resolution supported the revision of the IHRs. The stated purpose and scope of the IHR are "to prevent, protect against, control and provide a public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks, and which avoid unnecessary interference with international traffic and trade." The revised regulations grant new powers to the WHO, including an information-gathering responsibility that is not limited solely to official state notifications or consultations, but covers all available scientific evidence and other relevant information. The WHO can consult unofficial reports and facilitated collaboration from the countries through verification requests. The new IHR constitute a shift towards an expanded governance strategy that integrates multiple threats, actors and objectives

. .

¹⁷¹ ______, "International Health Regulations (IHR)."

¹⁷² David P. Fidler and Lawrence O. Gostin, "The New International Health Regulations: An Historic Development for International Law and Public Health," *Journal of Law, Medicine & Ethics* 34, no. 1 (2006).

¹⁷³ Obijiofor, Global Health Governance: International Law and Public Health in a Divided World. pp78

WHO, "International Health Regulations," ed. World Health Organization (Geneva2005). See page 10

¹⁷⁵ During the author's summer 2010 research experience in Washington, D.C., she met with Jose Fernadez, from the U.S. Department of Health and Human Services. Jose mentioned about the significance of good governance for implementing the revised IHR in the United States and other Member States. He discussed the importance of good basic infrastructure for core capacity building and disease reporting. The WHO, with the revised regulations wants to go beyond the public sector to improve the IHR by involving hospitals, clinics, diagnostic labs, and non-profit organizations. The IHR does not allow the private sector to have a direct say in the policy-making process. Nevertheless, their insights on advice in healthcare facilities, port management, port security, and sanitation are significant.

in a flexible, forward-looking and universal manner.¹⁷⁶ The approach to transnational networks, PPPs, and their success or failure is significantly influenced by the history and governance pattern of the multilateral organization (in this case, the WHO).

Structure of the WHO: Identification of the elements of governance

International health governance occurs via organizations like the World Health Organization. The WHO has long been instrumental in monitoring and responding to disease outbreaks, setting standards for health reporting, and developing technical expertise for member countries.¹⁷⁷ The WHO holds the main responsibility for public health at a global level. Media attention has been focused on auxiliary factors such as leadership of the WHO, rather than on the real factors that limit its effectiveness. These factors relate to the organization's structure and also to its current priorities, methods, and management. The WHO has been criticized repeatedly for various reasons. It was criticized for its lack of activity in public health. The organization has also been labeled a failing bureaucracy. Several factors have led to the WHO being ineffective. The functioning of the WHO occurs through regional offices who advise their regions on technical matters, finance the training of health professionals, and influence health policy decisions. The WHO itself has no direct authority to intervene in policy-making and disease prevention in nations. Actions at all policy levels-district, state, national, and international—have a strong impact on the organizational stature. The WHO's collaboration centers participate on a contractual basis in cooperative programs supported by the organization at the country, inter-country, regional, interregional, and global levels. ¹⁷⁹ With the ability to work through policies and laws, local people and workers are better able to organize themselves. The ambiguous nature of responsibilities has led to the misrepresentation of the WHO. 180 The centers are a good example of collaboration at multiple levels by the WHO. It was noted that, by the 1990s, it was poorly managed and had major structural problems. It has also been accused of

¹⁷⁶G. Rodier, "Global Public Health Security," Emerging Infectious Diseases 13, no. 10 (2007).

¹⁷⁷ S. Brown, "Global Public-Private Partnerships for Pharmaceuticals: Operational and Normative Features, Challenges, and Prospects," *Canadian Public Administration Journal* (2008).

¹⁷⁸ Fiona Godlee, "The World Health Organization: WHO in Crisis," *British Medical Journal* 309, no. 6966 (1994).

¹⁷⁹ World Health Organization, "Basic Documents." The WHO requires expert advice for overall scientific and technical guidance, as well as for direct support of global, regional, and local cooperation for programs for health development. It obtains advice from members of collaborative centers, NGOs, scientific and technical meetings. ¹⁸⁰ Godlee, "The World Health Organization: WHO in Crisis." The annual budget of the WHO is estimated to be US\$ 1.7 billion.

cronyism, and operating on a stagnant budget. The WHO guidelines and procedures are a hindrance to its own programs. The WHO and the UN agencies such as the International Labor Organization, Food and Agricultural Organization (FAO), United Nations Children's Fund (UNICEF), and the UN Population Fund have shared a global role in both regulation and development. Since the 1980s, however, the OECD and World Bank have also become involved with health sector and policy reforms. One factor behind the weakening of the WHO has been the increased influence of the World Bank, which plays a major role in health policy-making and the funding of developing nations. Global leadership and advocacy remain the major missing ingredients in the WHO's formula in making a difference in health worldwide.

The perception that the UN was anti-business did not arise until the end of Cold War. The binding codes and stringent rules that were set for all the multinational commercial enterprises contributed to this anti-business image. Kofi Annan's appointment as UN Secretary-General is believed to be the one of the major reasons for the shift from anti-business to pro-business approach in the UN. The first milestone in this shift was the establishment of the United Nations Fund for International Partnerships (UNIP) in 1997. In many of Annan's public addresses, he reiterated the need for shared values and principles. The Millennium Development Goals laid out by the UN have also explicitly dedicated the eighth goal to "developing a global partnership for development," meaning more collaboration with private and non-state actors. The MDGs justifies the significance of incorporation of the Acklesonian-Lapidian elements of governance in the UN and its agencies.

¹⁸¹ Global Health Watch, "Making WHO Work Better: An Advocacy Agenda for Civil Society," (London: Global Health Watch, 2006).

¹⁸²G. Yamey, "WHO's Management: Struggling to Transform a Fossilised Bureaucracy," *British Medical Journal* 325, no. 7373 (2002). Many experts argue that the World Bank has displaced the WHO as a major influence in health policy as a consequence of the bank's funding power. According to the World Bank, the WHO must focus on control of communicable diseases and developing universal health norms and standards. However, the primary authority for health systems strengthening in third world should lie with the bank.

¹⁸³ Bull and McNeill, *Development Issues in Global Governance: Public-Private Partnerships and Market Multilateralism.* p7-9. The eight United Nations Millennium Development Goals are to eradicate extreme poverty and hunger; to achieve universal primary education; to promote gender equality and empower women; to reduce child mortality; to improve maternal health; to combat HIV/AIDS, malaria, and other diseases; to ensure environmental sustainability; and to develop a global partnership for development. The MDGs are inter-dependent; all the MDG influence health, and health influences all the MDGs. For example, better health enables children to learn and adults to earn. Gender equality is essential to the achievement of better health. Reducing poverty, hunger and environmental degradation positively influences, but also depends on better health.

The evolution of the WHO's strategy and programs, when studied in relation to the international political climate, can be divided into the following periods: 184

1. 1948 to 1962: initial challenges, structural organization, delegation of duties, and responsibilities

The year 1948 is marked by the birth of the WHO and the Cold War. In spite of the Cold War, there was consensus on the WHO's authority in international health. The Soviets backed the WHO and provided support for WHO public health campaigns, even in the years when the USSR was not an active member (1949-1957). The organization, being naïve, had to combat the challenges of a post World War II world. The WHO was still establishing its governance structures and its strategies were yet to be tested. The concept of health began to be considered as an indispensable pre-requisite to industrial and agricultural development, as well as to social progress among nations that were still reeling from the effects of war. The WHO initiated many sanitation and disease control measures during this period. This led to increased use of antibiotics and insecticides, attracting pharmaceutical companies' interest in the process. The cooperation between private industry and the WHO dates back to this period, although the relationship was more often a conflicted one. The 1950s also demonstrated growing concern of the WHO for environmental health. As evident from the global map of activities, this period can be characterized as the beginning of new era in health cooperation and emergency management.

2. 1963 to 1972: focus on health, development, and vaccination programs

The objectives in the 1960s were similar to those of the 1950s. Campaigns against communicable diseases became stronger and broader, with diseases such as TB, poliomyelitis, leprosy, bihharziosis, and malaria being targeted. In 1967, the WHO launched an intensified plan to eradicate smallpox; the "ancient scourge" threatened 60 percent of the world's population, killed every fourth victim, scarred or blinded most survivors, and eluded any form of treatment. This decade was one of intensive preparation and training of all UN agencies, as well as of programs promoting development in the recently independent nations. At the end of 1967, there were 126 member states, as compared with 85 in 1957. The new members came particularly

48

¹⁸⁴ Beigbeder et al., *The World Health Organization*.

¹⁸⁵ WHO, The First Ten Years of the World Health Organization (Geneva: World Health Organization, 1958).

¹⁸⁶ Beigbeder et al., The World Health Organization. p18-21

from parts of Africa served by the WHO's Regional Office in Brazzaville, and the number of member states in Africa grew from 3 in 1957 to 29 in 1967. ¹⁸⁷

3. 1973 to present: new strategy of "Health for All by the Year 2000" with the involvement of non-state actors, and private enterprises

Incorporating the attributes of institutionalization and professionalization of international health into the WHO were the organization's highlights following World War II. Its most prominent activity was the eradication of smallpox and the formulation of the "Health for All by the Year 2000." The Declaration of Alma-Ata was adopted at the International Conference on Primary Health Care (PHC), Almaty (formerly Alma-Ata), currently in Kazakhstan, 6-12 September 1978. This conference convened jointly by the WHO and UNICEF made a declaration recognizing primary healthcare as key in attaining Health for All. In May 1981, the WHA adopted this global strategy of "Health for All by the Year 2000." The 1980s was a decade of structural adjustment that lacked international agencies' concern for health. By the 1980s, there was mounting dissatisfaction, arising from different quarters, regarding the fulfillment of international health goals. In the 1990s, the WHO expanded and restructured its global policy agenda, shifting away from traditionalism in favor of a more neoliberal approach to decision making within the health sector. 190 The gradual involvement of funding agencies, something that started in the beginning of the 1990s, gained momentum on account of various reasons. Such reasons included the WHO's lack of ability to focus on data collection, research, analysis and action in relation to health systems, as well as incapability to give increased prominence to "vertical programs" (i.e., programs targeting specific diseases or action). The WHO steadily lost its share of international health resources and influence to competing actors. Despite the inefficient bureaucracy and funding issues of the 1980s and 1990s, the WHO tried to regain its authority by echoing the World Bank's mission of "investing in health." Thus, it was only in the late 1980s and into the 1990s that multiple players began to participate in the WHO's

¹⁸⁷ World Heath Organization, *The Second Ten Years of the World Health Organization*, 1958-1967 (Geneva: WHO, 1968).

¹⁸⁸ A. E. Birn, "The Stages of International (Global) Health: Histories of Success or Successes of History?," *Global Public Health* 4, no. 1 (2009).

¹⁸⁹ "Declaration of Alma-Ata", (paper presented at the International Conference on Primary Health Care, Alma-Ata, USSR, 1978).

¹⁹⁰ Neoliberalism, a political movement which began in the 1960s, blends traditional liberal concerns for social justice with an emphasis on economic growth. Houghton Mifflin Company, *The American Heritage College Dictionary* (Houghton Mifflin, 2004).

global health policy-making. The WHO has always been dependent on others for the achievement of its targets and goals. In the concept of "Health for all by the Year 2000," nation states, international community, and local community members were identified as the main players. However, "Health for all in the 21st century," endorsed by the WHO and WHA in 1998, identified PPPs as the WHO's main group of policy responders. 191 The focus of global development efforts was strongly oriented towards the role of nongovernmental organizations. In 1976, the then Director-General of WHO, Halfdan T. Mahler, called for much greater use of NGOs in areas of primary health care and rural development. NGOs, which had practical experience in serving the underprivileged, started to play a major role as delivery agents for aid and players in policy development; they not only offered a technical skill set, but were also uniquely equipped to win the trust of the people. To help the organization improve links with funding agencies and NGOs, WHO was urged to prepare its program of work in such a way that it clearly stated its priorities and important fields of endeavor, to encourage various organizations to allocate money for causes that the WHO considered important. 192 These factors, when practically applied to WHO policy and action, helped to significantly enhance the impact of WHO resources. The NGOs informally began to help promote the cooperation and execution of the WHO's activities at multiple levels. This was complemented by increased contributions from corporate actors such as the Gates family (via the Bill and Melinda Gates Foundation). 193 The foundation started participating in and advocating the idea of PPPs through Roll Back Malaria, Stop TB, and the GAVI alliance. 194 This shift in focus to include a diverse set of players was also reflected in the UN's Global Fund, which gave direct representation to industry and nongovernmental organizations. 195 In 1993, the WHA called on the WHO to mobilize and

¹⁹¹ C. Thomas and M. Weber, "The Politics of Global Health Governance: Whatever Happened To "Health for All by the Year 2000"?," *Global Governance* 10, no. 2 (2004).

¹⁹² S. Litsios and World Health Organization, *The Third Ten Years of the World Health Organization*, 1968-1977 (World Health Organization, 2008). pg30-36

¹⁹³ Dr. William Smith, professor at Smith College, referred very appropriately to the corporate giants like Bill Gates, and Steve Jobs, political leaders like Bill Clinton, and celebrities like Bono and Angelina Jolie among others participating in public health welfare as "Rockstars of Global Health Fundraising" at a seminar titled "A Tale of Two Parasites: The Global Elimination Programs for Lymphatic Filariasis and River Blindness" held in the department of Biology, Kansas State University, Manhattan., March 2011.

 ¹⁹⁴ Godlee, "The World Health Organization: WHO in Crisis.", Garett, "The Challenge of Global Health."
 ¹⁹⁵ In many cases, however, this has resulted in a situation where the WHO has been underrepresented in such partnerships. M. Koivusalo, *The Shaping of Global Health Policy*, ed. L. Panitch and C. Leys, Socialist Register 2010. Morbid Symptoms: Health under Capitalism (London UK: The Merlin Press, 2009). Eeva Ollila, Globalism and Social Policy Programme (GASPP), and STAKES, "Global Health-Related Public-Private Partnerships and the

encourage support of partners from nation states, nongovernmental organizations, and private sector entities for health development. This was part of the implementation strategy for "Health for All by the Year 2000."¹⁹⁶

The current period may be understood as a reaction to the previous stages, characterized by the entry of new actors and values into the international health field. Transnational disease spread, issues of public health security, and the need for improved global health diplomacy have challenged the Westphalian governance structure, a system upon which the WHO was built. 197 Westphalian sovereignty is the concept of nation-state sovereignty based on two things: territoriality and the absence of a role for external agents in domestic structures. States were considered the primary institutional agents in an interstate system of relations. Scholars of international relations have identified the modern, western system of international cooperation amongst states, multinational corporations, and organizations as having begun at the Peace of Westphalia in 1648. 198 As acknowledged in chapter 2 of the thesis, contemporary forms of global governance have made a transition from the Westphalian approach. The IHR only covered diseases of interest to the great powers: cholera, plague, and yellow fever ("Asiatic diseases"). The WHO did not have the legal authority, under international law, to release information without the consent of the member state. In a globalized context, the regulatory processes and strategies of the WHO needed to transcend to a "post-Westphalian public health" approach to effectively respond to the issues faced today. This shift has resulted in a world order characterized by a combination of formal and informal sources of regulatory authority, policy suggestions, and mechanisms from nation-states, domestic and international non-state actors, and international organizations. Thus, today, both the dominant actors of the Westphalian system and the emerging actors (private sector, civil society, and philanthropic organizations) interact in complex ways. 199 The transition has resulted in a system where global health issues have become a subject of concern for leaders and the public worldwide. Appointed as the WHO Director-

United Nations," ed. Ministry of Foreign Affairs, Global Social Governance. Themes and Prospects (Helsinki: Finnish Ministry of Foreign Affairs, 2003).

¹⁹⁶ World Health Assembly, "Health Development in a Changing World - a Call for Action," (Geneva: World Health Organization, 1993). (Resolution WHA46.17)

¹⁹⁷ O. Aginam, "Health or Trade? A Critique of Contemporary Approaches to Global Health Diplomacy," *Asian Journal of WTO & International Health Law and Policy* 5, no. 2 (2010).

¹⁹⁸ Gabel, *Global Inc: An Atlas of the Multinational Corporation*. p2. Peace of Westphalia, signed in 1648, had major European countries agree that the national interests and goals of states (and later nation-states) were widely assumed to go beyond those of any citizen or any ruler.

¹⁹⁹ Aginam, "Health or Trade? A Critique of Contemporary Approaches to Global Health Diplomacy."

General in 1998, part of the credit for this shift in governance routine in the WHO is attributed to the leadership of Gro Harlem Brundtland, too. She introduced a corporate culture into the WHO to make it less bureaucratic and more efficient. Individuals from the for-profit private-sector were recruited to assume important positions within the organization. Brundtland appointed Michael Sholtz, formerly with Ciba-Geigy and SmithKline Beecham (now GlaxoSmithKline), as head of Health and Technology of the WHO.²⁰⁰ This is an example of effective incorporation of the Acklesonian-Lapidian elements to the WHO's governance architecture. The organization has always been dependent upon others for the achievement of its targets and goals.²⁰¹ A variety of tasks and projects accompany partnerships such as negotiations, formal-informal consultations, discussions with corporations and their business associations, co-regulatory arrangements to implement voluntary (legally non-binding) codes of conduct, and corporate social responsibility projects, many of which are cause-related marketing or other strategic sponsorship projects. 202 Partnerships are not a recent development in the WHO. The organization has long collaborated with the pharmaceutical industry toward the discovery, development, and distribution of drugs. It has also been involved in channelizing funds for certain research projects and enhancing the medicine market.²⁰³ One of these projects, the Special Program for Research and Training in Tropical Diseases (TDR), was established in 1975 by the WHO, UNDP, and the World Bank. TDR was clearly a public sector initiative, but it could not achieve some of its specific goals and targets, especially with respect to drug development and delivery, without the participation of the private sector. Hence, it collaborated with the pharmaceutical sector on certain aspects of the program.²⁰⁴

There are several differences between the old and more recent partnerships. Recent ventures involve more money, including large donations from private foundations. The private sector is also more engaged in the existing governance structures and policy-making

²⁰⁰ Lee, World Health Organization (WHO). p114-116

 $^{^{201}}$ Thomas and Weber, "The Politics of Global Health Governance: Whatever Happened To "Health for All by the Year 2000"?."

²⁰² J. Richter, "Public-Private Partnerships for Health: A Trend with No Alternatives?," *Development* 47, no. 2 (2004).

²⁰³ Bull and McNeill, Development Issues in Global Governance: Public-Private Partnerships and Market Multilateralism. p66-68

²⁰⁴ Adetokunbo Ô. Lucas, "Public-Private Partnerships: Illustrative Examples," in *Public-Private Partnerships for Public Health: Harvard Series on Population and International Health*, ed. Michael Reich, James E. Austin, and Kent Buse (Cambridge: Harvard University Press, 2002).

initiatives.²⁰⁵ The health sector, amongst others, has seen the heaviest proliferation of PPPs over the past few years. Due to budget constraints, the WHO has entered into partnerships with the business sector that have enabled it to not only leverage its own resources, but also access new resources in order to fulfill its mandate. Currently, the annual budget of the WHO is estimated to be US\$1.7 billion and total global expenditure for health is approximately US\$4.1 trillion. ²⁰⁶ The WHO tends to enter into partnerships that have well-defined and specific health outcomes such as those that are disease or risk-factor oriented. The basis of these partnerships should complement the ethical values and missions of the WHO. These collaborations will bring entrepreneurial talent and a business culture into the WHO, which may improve the organization's efficiency. 207 The WHO has initiated two approaches to regularize its processes of work with the non-state actors. Similarly, the business community may also adopt and endorse norms and values that the WHO advocates in relation to workers' rights or to occupational health.²⁰⁸ A relevant PPP must fulfill the following WHO requirements for it to be integrated with the organization: it must be aligned with the WHO's priorities, and must offer an innovative approach to achieve results that cannot be achieved by more traditional means. PPPs frequently evolve from an informal network to a formal operational one. Despite their lack of expertise in policy-making, PPPs have demonstrated their value in areas where the public sector has proven inefficient (e.g., in research and development, manufacturing, and marketing).²⁰⁹ The past two decades have witnessed the emergence of the Acklesonian and Lapidian elements of governance structure in the WHO. The engagement of the WHO with non-state actors and private sector entities is not only a result of pressure from its constituent nation states, but also the result of the organization's desire and conviction to regain authority, legitimacy, and effectiveness in today's market-oriented world.

²⁰⁵ Reich, Austin, and Buse, *Public-Private Partnerships for Public Health*.

²⁰⁶ World Health Organization, "Spending on Health: A Global Overview," WHO, available at http://www.who.int/mediacentre/factsheets/fs319/en/.

^{207&}lt;sup>2</sup>—, "Public-Private Partnerships for Health," WHO, available at http://www.who.int/trade/glossary/story077/en/.

²⁰⁸ Reich, Austin, and Buse, *Public-Private Partnerships for Public Health*. P175-180

²⁰⁹ R. Widdus, "Public-Private Partnerships for Health: Their Main Targets, Their Diversity, and Their Future Directions," *Bulletin of the World Health Organization* 79, no. 8 (2001).

The role of NGOs, private foundations, and intermediaries

Article 71 of the WHO constitution states that the WHO may make arrangements for consultation and cooperation with NGOs in carrying out its international health work. 210 It is essential for the WHO to coordinate and interact with other inter-governmental organizations, national health institutions, and NGOs in order to avoid conflicts among the various actors at all levels of operation. ²¹¹ Joint programs help to manage overall resources, and avoid the duplication of schemes and projects. The WHO has a long history of involvement with NGOs and civil society in their programs and projects. The objective of the WHO's collaboration with NGOs is to promote policies, strategies, and programs derived from the decisions of the organization's governing bodies, as well as put together programs, and to achieve harmony in balancing the interests of the various sectoral bodies.²¹² The NGOs benefit the WHO by assisting in its campaigns and projects at multiple levels, especially at local community level. The main criterion for admission into the office of the WHO requires that an NGO's area of expertise be within the purview of the WHO. The ethics and principles must be in accordance with those of the WHO and should be non-commercial in function. 213 The number of NGOs admitted into authoritative relations with the WHO has been increasing over the years, with 26 in 1951, 68 in 1966, 125 in 181, 184 in 1996, and over 250 in 2008. There is a diverse range of expertise that the NGOs cover, ranging from science to medicine, social/humanitarian work (e.g., Lions Clubs, Rotary International, International Committee of the Red Cross, Save the Children Fund etc.), and environment (International Union for Conservation of Nature and Natural Resources etc.).

²¹⁰ World Health Organization, "Constitution of the World Health Organization." Article 71. See page 16

²¹¹ World Health Assembly, "Constitution of the World Health Organization."

²¹²——, "Principles Governing Relations with Nongovernmental Organizations," in *Civil Society Initiative (CSI)* (Geneva: World Health Organization, 2001).
²¹³ Ibid.

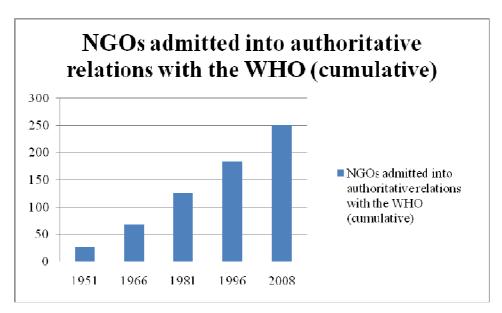


Figure 2. Number of NGOs admitted into the WHO over the years

The WHO recognizes only one category of formal relations, known as official relations, which incorporates those NGOs that meet the criteria described in the "Principles Governing Relations with NGOs." All other contacts, including working relations, are considered informal.²¹⁴ The policy relations of the WHO with NGOs may start off as informal, involving exchange of information based on common interest with a reciprocal participation in technical meetings. There is no written agreement before the meetings. The meetings eventually culminate in a possible collaboration for developing medical and other standards, publication of scientific documents, collection of data for setting up a specific program, and also for planning research.²¹⁵

Partnership brokers operate as active links or intermediaries between different organizations and sectors (public, private, and nonprofit groups) that aim to collaborate as partners in a sustainable development initiative. ²¹⁶ In most cases, external donors and individual organizations or NGOs, as well as private foundations like the Bill and Melinda Gates Foundation and the Rockefellers Foundation play the broker's role. Knowledge brokers—the people who bridge the gap between the producers and users of knowledge—are well-known for

²¹⁴ Ibid

²¹⁵ Beigbeder et al., *The World Health Organization*.

²¹⁶ Ros Tennyson, *The Brokering Guidebook - Navigating Effective Sustainable Development Partnerships* (The Partnering Initiative, 2005). The WHO recommends adopting the brokering guidelines from this book for potential intermediaries and brokers.

their role as intermediaries in putting research results into policy and practice. They can function on behalf of the public sector or the private sector. Historically, brokers in multi-sector partnerships have played a critical role in process management and behind-the-scene leadership for the benefit of potential partners.²¹⁷ The concept of brokers is slowly gaining ground in the health sector due to the surge in health initiatives and partnerships. For example, the Global Forum for Health Research helped to broker and facilitated the founding of some of the publicprivate partnerships, such as the Medicines for Malaria Venture. The Bill and Melinda Gates Foundation is another very good example of a broker/collaborator. It donates enormous amounts of grants to partnerships, making it attractive for the private companies to partner with. The private foundations function to bring different parties together for a discussion and then motivate the partners to collaborate by offering predictable funding and a businesslike approach to the projects.²¹⁸

See table 5 for a discussion on the merits of partnerships for the WHO.

²¹⁷ C. H. Sin, "The Role of Intermediaries in Getting Evidence into Policy and Practice: Some Useful Lessons from Examining Consultancyclient Relationships," *Evidence & policy* 4, no. 1 (2008). ²¹⁸ Bull and McNeill, *Development Issues in Global Governance: Public-Private Partnerships and Market*

Multilateralism.

Table 5. Effect of partnerships on the working of the $WHO^{219,220}$

Functions and responsibilities	Enabling attributes	Partnership merits
Acts as the world health authority.	 Membership of 193 member states. Constitution which specifies health for all as a primary objective. 	 Industry tends to abide by the principles of health for all and other missions of the WHO. Drugs and funding in health resources are more easily accessible. WHO has increased access to knowledge, resources, and expertise from the private sector and the NGO community.
Formulates regulations and standards in global health.	 Universal membership Impartial approach to decision-making Technically sound staff and networks. 	 Public and private sectors more apt to cooperate Civil society and private sector members more likely to adhere to rules and standards as they participate in policymaking.
 Promotes and creates facilities for R&D and diagnostics. Controls transnational spread of pathogens Controls trade in illegal substances. Aids in information dissemination, capacity building, and training for health personnel in member states. 	Funded and supported by member state governments and private donor foundations.	 Additional partners become involved in health development. Number of R&D projects in the field of vaccine and drug production increases along with improved diagnostic techniques. Private companies are compelled to develop ethically. Global health security becomes more robust.

 $^{^{219}}$ Reich, Austin, and Buse, *Public-Private Partnerships for Public Health.* P179-184 220 Buse and Waxman, "Public-Private Health Partnerships: a Strategy for WHO."

Conclusion

Looking at the transition of the WHO's evolution over the last 60 years, one can argue that it has been robust in certain aspects and weak in others. However, the WHO is extremely important, especially for the poorest sections of the world. While there are numerous global health institutions, it is the sole multilateral institution with the legitimacy and authority to promote and protect world health. The WHO achieved milestones in successfully eradicating smallpox in 1980 and establishing the Framework Convention on Tobacco Control (FCTC) in 2003. 221,222 With respect to polio eradication, the WHO Western Pacific Region is now the second in the world to be certified as polio-free (after the WHO Region of the Americas in 1994). However, the WHO has faced tremendous challenges in the Malaria Eradication Program, AIDS initiatives, and "Health for All" strategies. The organization began to lose its position as the world's prominent leader in health, as non-governmental organizations and other UN agencies began to play an important role in shaping international health policy. In the 1990s, the recognition that disease prevention and good public health management is motivated by economics and trade broadened the WHO's strategic vision and thinking. The intersection of health issues with economics and trade security has led the public health community to engage with players from diverse backgrounds. This pushed the organization to revamp its governing framework substantially and break away from the conventional mold of bureaucratic functioning. Gro Brundtland, who assumed office in 1998, played a crucial role in bringing about internal transformations and raising its profile internationally. She reduced the number of political appointments and increased the involvement of private players in governance structure.²²³ In facing the current budget crisis, the WHO has been forced to become increasingly reliant upon private sources of financing and public-private partnerships. The creation of global health

World Health Organization, "Anniversary of Smallpox Eradication," WHO, available at http://www.who.int/mediacentre/multimedia/podcasts/2010/smallpox_20100618/en/.

²²¹ Smallpox was officially declared eradicated in 1980 and is the first disease to have been fought on a global scale. Success has been attributed to a strong research component, an emphasis on epidemiology and surveillance, and the flexibility to adapt to new findings and change course when needed.

^{2222 , &}quot;WHO Framework Convention on Tobacco Control," WHO, available at http://www.who.int/fctc/about/en/. The FCTC was developed in response to the tobacco epidemic. The tobacco culture has become rampant due to globalization, trade liberalization, global marketing, transnational advertising, and sponsorship. This is first treaty to come out of the WHO to address addictive substances. The agreement seeks "to protect present and future generations from the devastating health, social, environmental and economic consequences of tobacco consumption and exposure to tobacco smoke" by enacting a set of universal standards stating the dangers of tobacco and limiting its use in all forms worldwide.

223 Yamey, "WHO in 2002."

initiatives and partnerships is a part of the ongoing process of revision. See table 7 for the list of PPPs initiated by the WHO.

Table 6. List of public-private partnerships initiated by the WHO

- 1. Global Alliance to Eliminate Lymphatic Filariasis
- 2. Global Fund to Fight AIDS, Tuberculosis and Malaria
- 3. Global Fire Fighting Partnership
- 4. Malaria Vaccine Initiative
- 5. Medicines for Malaria Venture
- 6. Roll Back Malaria Partnership
- 7. Stop Tuberculosis Partnership
- 8. The Partnership for Maternal, Newborn and Child Health
- 9. UNAIDS/Industry Drug Access Initiative
- 10. Global Polio Eradication Initiative

Source: Adapted from Reich, Michael, James E. Austin, and Kent Buse. Public-Private Partnerships for Public Health. Harvard University Press, 2002.

GAVI and TDR can be regarded as exemplary partnership-driven initiatives by the WHO. GAVI's primary objective since its establishment in 2000 has been to increase poor countries' access to immunization. TDR, established in 1975 and executed by the WHO, helps to coordinate, support, and influence global efforts to combat a portfolio of major diseases among the underprivileged. TDR is a diverse program that indulges in partnerships and networks at all levels. The MDP is another successful partnership in health and can be considered as a possible PPP model for addressing problems confronting international health.

WHO, available at http://apps.who.int/tdr/svc/about.

J. F. Naimoli, "Global Health Partnerships in Practice: Taking Stock of the Gavi Alliance's New Investment in Health Systems Strengthening," *International Journal of Health Planning and Management* 24, no. 1 (2009).
 World Health Organization, "TDR, a Special Programme for Research and Training in Tropical Diseases,"

The program has been playing a pivotal role in the control of onchocerciasis in Africa for the past 20 years.

The purpose of the WHO's work is to improve people's lives, reduce the burdens of disease and poverty, and provide access to responsive health care for all. In spite of being the lead agency in health, it is important to recognize that the global health agenda is too broad for the organization to address alone.²²⁷ By adhering to the widely endorsed guidelines on collaboration within the commercial sector, the WHO can maintain its integrity and legitimacy, while still making a valuable contribution towards partnerships.²²⁸ This chapter demonstrated that the WHO over time has embraced all the three of the Ackleson-Lapid elements of governance (i.e., formal-informal policy actions, public-private partnerships, and actions at multiple levels). In spite of the numerous criticisms for involvement of non-state actors in governance (i.e., public-private partnerships) incorporation of all three elements by the WHO is evident. The next chapter will delve further into some key partnerships that the WHO has been part of. The chapter will also include a comparative review of both successful (MDP and TDR) and unsuccessful ventures (the "3 by 5" initiative and the Malaria Eradication Program) that will, hopefully, work to justify the value of Acklesonian-Lapidian elements of governance in international health.

²²⁷ Richardson and Allegrante, "Shaping the Future of Health through Global Partnerships."

²²⁸ Nishtar, "Public-Private 'Partnerships' in Health - a Global Call to Action." There is considerable skepticism surrounding the involvement of the private sector in public health. Private firms are often assumed to be solely seeking future profits and markets through partnerships, or to be seeking control over the agendas of international organizations, or to be using donations in order to claim tax deductions for financial reasons, or to be seeking new products, subsidized by public funds, to be used for private sale and profits. The pros and cons of participating in PPPs must be thoroughly discussed. The WHO guidelines must be such that it should be able to counter any conflicts that may emerge due to these partnerships.

Chapter 4 - Selected Projects of the WHO: the adoption of the elements of governance

Soon after her appointment in 1998, Gro Brundtland, the Director-General of the WHO, called for open and constructive relations with the private sector and civil society. This chapter will review a few selected initiatives and projects, the WHO has been involved with, such as the MDP, TDR, "3 by 5" initiative, and the Malaria Eradication Program (MEP). It will hel analyze the significance of partnerships, multiple players, and the method of formal-informal policy formulation in any international health initiative. Partnerships can be called a reflection of globalization. Thus, an international organization like the WHO is expected to cooperate globally across national governments, private industries, and civil society, while implementing actions locally.

Mectizan Donation Program (MDP)

The Mectizan Donation Program is a partnership involving partners from diverse backgrounds. The Mectizan Donation Program, partnered with the Task Force for Global Health, was established more than 20 years ago in 1987 to oversee Merck & Co., Inc.'s donation of the drug ivermectin popularly called Mectizan, for the control of onchocerciasis worldwide. The MDP's continued sustainability is attributed to cooperative partnerships that have created the program. The program is regarded as one of the longest running successful partnerships. It will be helpful to delve into the program's functioning and actions at various levels to assess the reasons for its success as a model for PPPH. The prime partners that make this partnership include the pharmaceutical industry (Merck and GSK), NGDOs (the Carter Foundation, Hellen Keller International amongst others²³¹), and international organizations {WHO, World Bank, CDC, African Program for Onchocerciasis Control (APOC), and Global Alliance to Eliminate

.

²²⁹ Buse and Waxman, "Public-Private Health Partnerships: a Strategy for WHO." p748

²³⁰ Onchocerciasis is a debilitating, disfiguring and often blinding disease endemic in 35 countries in sub-Saharan Africa, parts of Central and South America and in Yemen in the Middle East. It is the leading cause of blindness in the developing world. The disease is caused by parasitic worms that infect, multiply, and spread throughout the human body.

²³¹Interchurch Medical Assistance (IMA), Christoffel-Blindenmission (CBM), The Charitable Society for Social Welfare (CSSW), Lions Clubs International Foundation (LCIF), Mission to Save the Helpless (MITOSATH), U.S. Fund for UNICEF's (USF), United Front Against River Blindness (UFAR), Sight Savers International (SSI), and Organisation pour la Prévention de la Cécité (OPC).

Lymphatic Filariasis (GAELF). 232 In the mid-1970s, Merck discovered the drug, ivermectin. The WHO demonstrated the drug's favorable safety profile and efficacy in humans, after 7 years of clinical trials with assistance from TDR. There was much deliberation and debate over donating the drug outright. Initially, Merck thought that the WHO, governments of affected regions, international health agencies and charitable foundations would come forward to purchase and distribute the drug to the deprived. This would help the company to sell the drug at a subsidized rate and have it distributed to all who could not afford it. However, due to limited budgets for health care, few were interested in donating and distributing the drugs.²³³ Merck asked the WHO to form a partnership with it to distribute ivermectin to the affected areas. The WHO, skeptical of the drug, was also unsure about its own legal ability to build a partnership with a private company. The constitution states that "the WHO may make suitable arrangements for consultation and cooperation with non-governmental international organizations," but it does not specify anything about industry involvement.²³⁴ The WHO was also concerned about the degree of control it could exert in the whole process. Such collaboration was uncharted territory for both the WHO and Merck. Both the WHO and Merck were concerned about making negative assessments of individual governments' capacities to implement treatment programs. After nearly 9 years, Dr. Roy Vagelos, the then CEO of Merck, decided that drug donation was the right course of action.²³⁵ TDR/WHO viewed the drug as an effective tool for containing transmission of onchocerciasis and reduction of prevalence at large. In 1987, Merck invited Dr. William Foege to the donation effort.²³⁶ He was asked to oversee the committee of experts.

In 1998, Merck expanded the mandate of the program to include lymphatic filariasis elimination through the co-administration of Mectizan and Albendazole, donated by GlaxoSmithKline, in African countries and Yemen where lymphatic filariasis and

²³² Mectizan Donation Program, "Partners."

²³³ Jeffrey L. Sturchio and Brenda D. Colatrella, *Successful Public-Private Partnerships in Global Health: Lessons from the Mectizan Donation Program*, ed. B. Granville, The Economics of Essential Medicines (London: Royal Institute of International Affairs, 2002).

²³⁴ World Health Organization, "Constitution of the World Health Organization." Article 2

²³⁵ Anonymous, "Public/Private Partnerships in Global Health: Lessons from the Experiences of Merck & Co.," (Geneva: Commonwealth Secretariat, 2006). Despite differences in organizational cultures and scientific judgment, a working collaboration was forged between the two organizations for conducting clinical trials and then for distribution of ivermectin. This shared interest reflects a global world that seeks to promote better public health, particularly in poor countries.

²³⁶ Dr. Foege, former director of the CDC, had been a leader in the global campaign to eradicate small pox. His

²³⁰ Dr. Foege, former director of the CDC, had been a leader in the global campaign to eradicate small pox. His visionary approach to public health led to the development of a number of innovative initiatives within the program.

Onchocerciasis are co-endemic. SmithKline Beecham joined forces with Merck and pledged to donate albendazole free of charge to the WHO for use by governments and other collaborating organizations until lymphatic filariasis is eliminated from the world as a public health problem. Currently, more than 70 million treatments are approved for onchocerciasis in Africa and Latin America and 80 million for Lymphatic Filariasis in Africa and Yemen each year. 237 Since the MDP's inception in 1987, Merck has donated 1800 million tablets of Mectizan, with 530 million treatments for onchocerciasis administered. The program currently reaches 68 million people in Africa, Latin America, and Yemen annually, and via community-based treatment programs in 125,000 communities in 33 endemic countries. ²³⁸ The MDP has managed to involve numerous partners from heterogeneous backgrounds. It relies heavily on informal mechanisms and discussions to get the program moving. The WHO continues to play a leading technical role, while the World Bank is a major financial resource. The NGOs working in the area of river blindness prevention throughout Africa have faithfully distributed ivermectin to the population in need. By working along with ministries of health, they help mobilize funds, ensure all communities are treated, and monitor, evaluate and report on the programs. ²³⁹ The program is a good example wherein there has been both formal, as well as informal, methods utilized to attain objectives. As the program approaches its 25th year of operation, the potential to eliminate both diseases is feasible.²⁴⁰ The partnership is regarded very highly on aspects of governance and management, with only a few problems identified. It has been able to involve a wide array of partners through informal mechanisms that rely on goodwill and reciprocity. The reasons for the sustained success of the program can be listed due to various reasons.²⁴¹ With the drug being

²³⁷ Mectizan Donation Program, "Alleviating the Suffering Caused by River Blindness and Lymphatic Filariasis (Elephantiasis)" PDCI, available at www.mectizan.org. The WHO's Director-General Dr. Gro Harlem Brundtland welcomed the decision by international pharmaceutical manufacturer Merck & Co, Inc to expand their donation program for "Mectizan" (ivermectin) to include lymphatic filariasis in African countries where it is medically necessary. Gregory Hartl, "Major Private Sector Partner, Merck, Welcomed to Lymphatic Filariasis Control Effort," WHO, available at http://www.who.int/inf-pr-1998/en/pr98-76.html.

²³⁸ B. Colatrella, "The Mectizan Donation Program: 20 Years of Successful Collaboration - a Retrospective," *Annals of Tropical Medicine and Parasitology* 102, no. 1 (2008).

²³⁹ Sturchio and Colatrella, *Successful Public-Private Partnerships in Global Health: Lessons from the Mectizan Donation Program*. There were concerns that such donation programs might result in a disincentive for pharmaceutical companies to conduct research on diseases affecting poor countries, with an expectation that the drug will be ultimately donated to those nations.

 ²⁴⁰ Mectizan Donation Program, "Alleviating the Suffering Caused by River Blindness and Lymphatic Filariasis (Elephantiasis)".
 ²⁴¹ Adetokunbo Lucas, "Public-Private Partnerships: Illustrative Examples," in *Public-Private Partnerships in*

²⁴¹ Adetokunbo Lucas, "Public-Private Partnerships: Illustrative Examples," in *Public-Private Partnerships in Public Health* (Massachusetts, USA: UNDP/World Bank/TDR/WHO, 2000).

prescribed only as an annual dose, it was best suited for mass distribution. The Mectizan Expert Committee, consisting of public health experts and personnel from Merck and the WHO, provides technical guidance to the program. With this arrangement, the donor company keeps in close touch with the program, whilst ensuring that commercial interests do not interfere with operational decisions.²⁴² The MDP's delivery strategy accelerated by the WHO is performed effectively by community directed treatment of ivermectin. This has enabled communities to organize, direct, and manage their own treatment, with 125,000 communities now responsible for Mectizan treatment. There were well defined roles and responsibilities for all the actors involved at the onset of the project. The MDP managed to efficiently report back to key stakeholders regarding the organization's direction and performance.²⁴³ It provided coordination mechanisms and engaged partners' interest in its shared vision and mission. The reason for the sustained impact of the partnership is that the coordination mechanisms largely depend on informal interactions built on norms of trust and cooperation, rather than by formal contracts, or ownerships of assets by a single firm that provides ivermectin distribution services. Through this program, Merck made unequivocal commitment to donate Mectizan (ivermectin) for as long as needed and wherever needed, to combat this disease. 244

²⁴² D. H. Peters and T. Phillips, "Mectizan Donation Program: Evaluation of a Public–Private Partnership," *Tropical* Medicine & International Health 9, no. 4 (2004).

243 Colatrella, "The Mectizan Donation Program: 20 Years of Successful Collaboration - a Retrospective."

244 Ibid.

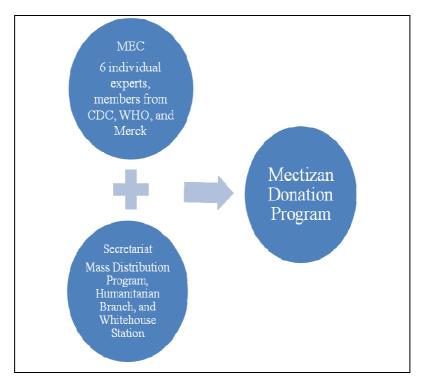


Figure 3. The Structure of the Mectizan Donation Program

Source: Peters, D. H., and T. Phillips. "Mectizan Donation Program: Evaluation of a Public-Private Partnership." *Tropical Medicine & International Health* 9, no. 4 (2004). pp-A5

The program has been lauded for its ability to clearly define roles and responsibilities, be ethical, and balance responsibility between countries and partners. Merck endorses partnerships because it believes that pharmaceutical companies have a responsibility to offer assistance when social, political, and economic conditions make it impossible for patients to receive life-saving therapies, and that Merck and others should leverage their expertise to help remove the barriers that stand between patients and the therapies they need.²⁴⁵

Special Program for Research and Training in Tropical Diseases (TDR)

Responding to the demands of the health situation in the 1970s, the WHO in collaboration with the UNDP and World Bank, established the Special Program for Research and Training in Tropical Diseases (TDR). The program aimed to develop safe and affordable means of diagnosis and treatment. It also sought to strengthen health systems and drug delivery in the

^

²⁴⁵ Sturchio and Colatrella, *Successful Public-Private Partnerships in Global Health: Lessons from the Mectizan Donation Program.* It is greatly respected in the international health community.

developing countries. The financial contributions to the program are provided by voluntary donations from governments, NGOs, as well as the three co-sponsoring organizations. TDR, through its co-sponsors UNDP, the World Bank, and the WHO, has access to technical expertise. It is based at the WHO headquarters in Geneva, Switzerland. TDR's other co-sponsoring agencies work with the WHO to combine their expertise in an effort to improve the existing methods and to develop new approaches for the prevention, diagnosis, treatment, and control of neglected infectious diseases.²⁴⁶ The WHO plays a prominent role in the program as the Executing Agency of TDR, with all TDR staff coming from the WHO. TDR adheres to the WHO's administrative rules and procedures. The program's interaction occurs in a broad range of disciplines from governmental and non-governmental organizations to individuals at international and national levels. The structure of the TDR's governing body consists of the following:²⁴⁷

- 1. Joint Coordinating Board (JCB) The JCB, created in 1978, is composed of 12 members selected by the resource contributors to the program, 12 government representatives chosen by the six regional committees of the WHO, six members representing other cooperating parties selected by the JCB itself, and the four co-sponsoring agencies.
- 2. Standing Committee It is comprised of senior representatives of the four co-sponsoring agencies, with ex-officio attendance from the chair and vice-chair of the JCB and the chair of scientific and Technical Advisory Committee (STAC).
- 3. Scientific and Technical Advisory Committee (STAC) It is composed of 21 leading health research scientists. The STAC reviews and evaluates all scientific and technical activities and makes recommendations on program activities, including the distribution of funds.

TDR governance structure ensures equal representation of the donor and recipient governments on its governing body—the Joint Coordinating Board (JCB). TDR focuses on nine diseases: malaria, schistosomiasis, onchocerciasis, lymphatic filariasis, African trypanosomiasis, Chagas disease, leishmaniasis, leprosy, and TB. TB was included only in 1999. TDR began as an exclusively public sector initiative. However, the program could not meet some of its specific

²⁴⁶ UNDP, World Bank, and WHO, "TDR Strategy (2000-2005)," in Special Programme for Research & Training in Tropical Diseases (TDR) (Geneva: WHO, 2000).

J. N. Reza, "Innovation for Health: Research That Makes a Difference" in *TDR Annual Report 2009* (Geneva Switzerland: World Health Organization, 2009).

goals and objectives, especially the development of new drugs, without the participation of the private pharmaceutical sector.²⁴⁸ Merck & Co., Inc. and SmithKline Beecham pharmaceuticals were the prominent participators amongst the ten other companies. Interactions with the private sector have resulted in an immense scientific contribution from the pharmaceutical industry, more effective delivery of specific services, and the creation of joint programs within TDR to address certain diseases. In the mid 1980s, many scientists from the private sector began participating in TDR's scientific advisory committees, something that was perhaps unparalleled in other global public health institutions.²⁴⁹ TDR's primary objective included the improvement and development of existing and/or new approaches preventing, diagnosing, treating, and controlling neglected infectious diseases. It also sought to strengthen the capacity of developing countries and to undertake the research required for developing and implementing new and improved disease control approaches.²⁵⁰ Thus, in order to fulfill these objectives, TDR had helped build dynamic "virtual" networks of researchers and research institutions that are widely dispersed worldwide. The program has assumed a substantial role as a leader, as well as a catalyst in initiatives for drug development, diagnostics, genomics, clinical evaluation, and biological screening. The unique feature of the program is the involvement of distinguished scientists from all over the world—from both developed as well as developing nations, from academia, research institutes, industry, as well as health departments. ²⁵¹ TDR values science over political agendas, and provides a neutral platform where scientists from all over the world can work together. The scientists, however, are not appointed as representatives of their respective companies in the TDR.

One of TDR's key values and organizational beliefs has been to forge partnerships in order to relieve the poor from neglected diseases; improve research and planning in agencies at international, national, and local levels; and close the global gap in research and development. This approach echoes the value of the incorporation of the three elements of governance to reach the organization's goals and objectives. TDR was one of the first programs of the WHO to

²⁴⁸ Reich, Austin, and Buse, *Public-Private Partnerships for Public Health*. p20-35.

²⁴⁹ Bijan Sadrizadeh, World Health Organization, and Special Programme for Research and Training in Tropical Diseases, *Making a Difference 30 Years of Research and Capacity Building in Tropical Diseases* (London: WHO, 2007).

²⁵⁰ UNDP, World Bank, and WHO, "TDR Strategy (2000-2005)."

²⁵¹ Lucas, "Public-Private Partnerships: Illustrative Examples."

²⁵² UNDP, World Bank, and WHO, "TDR Strategy (2000-2005)."

engage with the private sector in public-private partnership activities, long before PPPs became a popular institutional model in health. TDR catalyzed the creation of the first formalized PPPs for health research such as the Medicines for Malaria Venture (MMV) and the Foundation for Innovative New Diagnostics (FIND).²⁵³ TDR, being increasingly results oriented, has and will in the future take advantage of the numerous of networks and groups of stakeholders, to expand its brokerage role in this complex environment.

Achievements

TDR has worked with the industry for clinical evaluation of new drugs such as mefloquine (Hoffman la Roche), ivermectin (Merck), and elfornithine (Hoechst Marion Roussel, Inc). Ivermectin has now become the source of one of the most successful drug donation programs, the Mectizan Donation Program.²⁵⁴ In 2004, genome sequencing of Anopheles gambiae was completed by a TDR-fostered consortium and the drug Coartem was approved for use against malaria in infants and young children who weigh more than 5 kg. 255 TDR has played an important role in the generation of knowledge about the genomes of the parasites that cause African trypanosomiasis, Chagas disease, leishmaniasis, schistosomiasis, and lymphatic filariasis, and is now focusing on providing capacity to utilize the parasite genome data and in supporting developments in applied genomics and bioinformatics. ²⁵⁶ In the last decade, TDR has continued to play a part in the registration of certain new drugs and tools, while in other cases drug-development projects were transferred to new PPPs. TDR helped develop and launch the Medicines for Malaria Venture (MMV) in 1999, and supported the creation of the Global Alliance for TB Drug Development in 2000 and the Drugs for Neglected Diseases initiative (DNDi) in 2003. TDR has made greatest progress in the elimination of the 5 diseases, namely leprosy, by widespread adoption of TDR-generated evidence recommending multi-drug therapy;

²⁵³ Sadrizadeh, World Health Organization, and Special Programme for Research and Training in Tropical Diseases, *Making a Difference 30 Years of Research and Capacity Building in Tropical Diseases*. Dr Howard Engers, Director of the Armauer Hansen Research Institute in Addis Ababa, and former manager of TDR's leprosy vaccine and malaria vaccine research programs, summarizes TDR's success story by reiterating that "everything TDR has accomplished has been through partnerships."

²⁵⁴ Beigbeder et al., The World Health Organization. Pg 91-94

²⁵⁵ R. G. Ridley and E. R. Fletcher, "Making a Difference: 30 Years of TDR," *Nature Reviews Microbiology* 6, no. 5 (2008). With the support of the program, simple and cheap traps and screens to attract and destroy tsete flies and development of insecticides to limit density of sleeping sickness vectors was made possible. In addition, pyronaridine a Chinese anti-malaria drug is under development as an alternative to chloroquinone.

²⁵⁶ J. N. Reza, *Innovation for Health: Research That Makes a Difference* TDR Annual Report 2009 (Geneva

²³⁰ J. N. Reza, *Innovation for Health: Research That Makes a Difference* TDR Annual Report 2009 (Geneva Switzerland: World Health Organization, 2010).

Chagas disease, by supporting epidemiological surveys, vector-control tools, and blood screening; onchocerciasis, through the introduction of ivermectin, community directed treatment, and introduction of the REMO (rapid epidemiological monitoring of onchocerciasis); and lymphatic filariasis, through development of a new one-dose drug regime, as well as diagnostic tools and strategies for mass drug administration; and visceral leishmaniasis' through joint effort with the MOH of India and Bangladesh to eliminate the disease as a public health problem from the Indian sub-continent by 2015. ²⁵⁷ In its 30 years of existence, TDR has managed to fund over 8000 projects involving 6500 scientists. These projects include US\$300 million in grants for 5300 research and development ventures in developing nations and US\$117 million for 2700 projects dealing with research strengthening and training in about 80 developing countries. ²⁵⁸ The TDR also plays an important role in clinical trials involving public-private consortia and in the management of drug development though product development teams (PDTs). These teams guide the overall development program, including timelines, budget, study design and protocols. They comprise of pharmaceutical company experts, TDR members, clinical investigators and other external experts. ²⁵⁹

TDR has defined goals for the future: research on neglected priority needs, empowerment, and stewardship. TDR's key strength is its ability to work in partnerships and alliances. Such partnerships have provided TDR with financial resources, political support, technology, tools, and expertise necessary for carrying out their research. This is reciprocated by the TDR by providing funding for the research, making available detailed reports of research and policy by engaging with the WHO policy-makers and translating the research into policy. TDR engages in different types of partnerships: technical partnerships, advisory partnerships, research equality assurance partnerships, and capacity-building partnerships. TDR represents the voice of not only the global public policy sector, but also of the disenfranchised populations around the world. ²⁶⁰ For TDR, partnerships and the incorporation of the three elements of governance has aided in access to expertise and resources that have produced a steady stream of new knowledge and effective technologies.

²⁵⁷ Ridley and Fletcher, "Making a Difference: 30 Years of TDR."

²⁵⁸ Reich, Austin, and Buse, *Public-Private Partnerships for Public Health*.

²⁵⁹ Simon L. Croft, "Public-Private Partnership: From There to Here," *Transactions of the Royal Society of Tropical Medicine and Hygiene* 99, no. Supplement 1 (2005).

²⁶⁰ Reza, "Innovation for Health: Research That Makes a Difference ".

The "3 by 5" initiative

In recent years, an international consensus has emerged on the need to fight HIV/AIDS with a comprehensive response including treatment, care, prevention, and impact mitigation. In response to these opportunities and urgency the AIDS pandemic demanded, the WHO and UNAIDS released the "3 by 5" initiative in December 2003, a strategy that was aimed at providing antiretroviral treatment to three million people living with AIDS in developing countries and those in transition by the end of 2005. It was a global target endorsed by 192 countries at the WHA held in May 2004. 261 Like its early mass treatment top-down campaigns for malaria eradication, small pox, and leprosy, the WHO took a leading role in the implementation of the "3 by 5" program as well. The figure of 3 million represented only about half of the estimated number of AIDS patients worldwide in need of antiretroviral therapy (ART). By the end of 2005, the initiative achieved less than half of its stated goal. Despite achieving marginal success, the initiative failed to reach its target. ²⁶² Approximately 1 million people received treatment, which fell short of the milestone of 1.6 million set in the "3 by 5" strategy for June 2005.²⁶³ The "3 by 5" initiative was an unrealistically ambitious project. Partnerships and effective collaboration at both country and international levels were absolutely essential for accomplishing the initiative. The challenges and limitations that the initiative faced were

- lack of political commitment
- inadequate financial resources
- lack of coordination among multilateral institutions, international donors, and financial partners
- unskilled human resources
- lack of enough drugs and use of under-qualified drugs
- decline in preventive measures

²⁶¹ WHO, "About the 3 by 5 Initiative," available at http://www.who.int/3by5/about/en/.

²⁶² Roger Bate, "WHO's AIDS Target an Inevitable Failure," *Health Policy Outlook*, no. 3 (2006). Global treatment for HIV/AIDS required full political commitment and increased resources, and if countries successfully undertook a range of activities to rapidly expand services and build health systems capacity, the campaign would have achieved considerable success. World Health Organization, "Progress on Global Access to HIV Antiretroviral Therapy: An Update On "3 by 5"," (Geneva: WHO, UNAIDS, 2005). Pg 9

World Health Organization, "Progress on Global Access to HIV Antiretroviral Therapy: An Update On "3 by 5"."

- inequitable access to the drugs
- dominance of the WHO's administrative procedures

One of the major problems of the WHO's "3 by 5" campaign involved drug quality and management. In their effort to get as many people on treatment for as little cost as possible, the WHO pre-qualified non-FDA approved triple-drug therapies supplied by generic manufacturers. The project was hurried and functioned erratically. The initiative involved resources and assistance from the non-state actors (private sector and NGOs), but their roles were not well defined and well coordinated. The WHO could not boast solid collaborations with the pharmaceutical sector for the initiative. The "3 by 5" target was based on what could be achieved if countries, donors, and international agencies were fully successful in expanding political will, mobilizing funding resources, and building health infrastructure and systems. The venture lacked a strong nexus of stakeholders involved with it. The coordination was highly disorganized which also resulted in wastage of funds or inequitable allocation of funds. One of the other problems that confronted the WHO was that there was an overlap of previous HIV/AIDS initiatives being carried out simultaneously along with the "3 by 5" initiative in several member nations. The venture is an example of ineffective and incomplete implementation of the three essential elements of governance that the thesis has reiterated. 265

The Malaria Eradication Program (MEP)

Malaria was the first disease the WHO tried to eradicate in the 1950s, and it was also WHO's first failure at global eradication. The concept of malaria eradication was first proposed in 1947, when an interim commission of the WHO convened an expert committee on malaria. In 1955, the WHA decided for the WHO to implement the program, and it was launched under the leadership of noted malariologist Dr. Emilio Pampana. The strategy focused on reliance on spraying of DDT (dichloro-diphenyl-trichloroethane) and treatment with antimalaria drugs, notably chloroquinone. MEP recruited teams at inter-country and inter-regional levels to assess

²⁶⁴ Bate, "WHO's AIDS Target an Inevitable Failure." Generic manufacturers failed to prove "bioequivalence" of their versions of drugs. This delay of submitting data resulted in thousands of patients around the world receiving substandard quality drugs.

²⁶⁵ A. Boulle, "Scaling up Antiretroviral Therapy in Developing Countries: What Are the Benefits and Challenges?," *Postgraduate Medical Journal* 84, no. 991 (2008).

²⁶⁶ Beigbeder et al., *The World Health Organization*. In 1947, antimalaria drugs were recommended after controlled experiments by the interim commission; however the expert committee suggested the use of DDT as the main instrument for eradication. WHO, *The First Ten Years of the World Health Organization*. pg172-173.

the development of the eradication program in different countries and undertake diagnostic and epidemiological studies. The program enjoyed some initial success, achieving eradication in 65 countries by 1960.²⁶⁷ Eradication was achieved in industrialized nations in Americas, Asia, and Africa. In 1964, the campaign covered two-thirds of population exposed to the disease. However, from late 1950s onwards, the feasibility of the total eradication was questioned. A 1982 WHO report suggests that 365 million people were living in areas where malaria was endemic and where no specific anti-malaria measures were carried out. About 46% were still in endemic zone, where some measures were implemented. Numerous technical and operational problems were acknowledged by the WHO in the MEP: ²⁶⁸

- 1. inadequate health services
- 2. financial constraints
- 3. incoherent planning
- 4. over reliance on DDT (coupled with impact of the growing resistance to vectors to residual insecticides)
- 5. lack of motivation for developing improved drugs and insecticides
- 6. insufficient knowledge about essential antimalarial drugs at community level
- 7. inadequate distribution of drugs
- 8. shortage of trained personnel

Expenditures for the WHO kept rising each year from its inception, largely because many of its large-scale disease eradication programs took longer than originally anticipated. From 1957-1967, the WHO spent over US\$1 billion on the MEP. After spending an additional US\$1.2 billion from 1967-1975, the WHO realized that that it was unrealistic to sustain funding for a complete eradication, and in 1975, the program's objective was converted from malaria eradication to malaria control. Many of these problems stemmed from the fact that the disease had developed resistance to both chloroquine and DDT. The problems of resistance to insecticides and the evasive behavior of vectors became more widespread and evolved more

_

²⁶⁷ J. Siddiqi, *World Health and World Politics: The World Health Organization and the UN System* (University of South Carolina Press, 1995). Malaria eradication refers to impeding the transmission of malaria and elimination of reservoir of infective cases completely such that when the program ends there will be no relapse or resumption of transmission.

²⁶⁸ Ibid; Lee, World Health Organization (WHO).

²⁶⁹ José A. Nájera, Matiana González-Silva, and Pedro L. Alonso, "Some Lessons for the Future from the Global Malaria Eradication Programme (1955–1969)," *PLoS Med* 8, no. 1 (2011).

rapidly than expected. Despite the loopholes and ineffectiveness of the drugs and insecticides, the WHO did not resort to high quality research & development to produce improved antimalarial products. The WHO believed that further research was unnecessary, and that eradication required a rigid discipline in which local deviations from a centrally defined plan must be prevented. Hence, MEP did not boast of any particular private pharmaceutical sector involvement in its research & development, operation, and administration. The funds mainly came from the UNDP, UNICEF, and UNAIDS.²⁷⁰ Realizing that the organization had failed to achieve its original objectives, the focus and direction of this MEP was re-evaluated and converted into a control program in 1969. Recognizing the duration of time the MEP would take, UNICEF and other major collaborating agencies withdrew their support from the malaria program in favor of general health programs. Although planning was considered the strong point of the MEP at its outset, the planning was unsystematic and lacked vision. ²⁷¹ The WHO admitted that insufficient attention was given to modern management techniques. There were inadequacies and gaps in all their original plans of operation. MEP did not have a schedule in place. There were only unrealistic claims being made about it achieving total eradication. The programs in individual countries lacked many of the requirements of epidemiological knowledge and administrative organization which were overlooked because of the humanitarian appeal and urgency. 272 The MEP coordination occurred at three levels of command: central, intermediate, and peripheral. Despite operating at multiple levels, the program did not involve civil society or the NGO community who assist in staff training, surveillance, awareness, drug distribution etc. The program lacked designation of well defined functions for each member involved. Moreover, the major players included only the WHO, its regional offices, and the respective national governments. The narrow-minded vertical approach contributed to the failure of the campaign. It is evident that MEP was ineffective due to its execution under constrained and government administrative procedures.²⁷³ Communities should be encouraged and supported to adopt malaria elimination as their own goal, reporting abnormal situations, and creating a demand for

²⁷⁰ J. A. Najera, "Malaria and the Work of WHO," *Bulletin of the World Health Organization* 67, no. 3 (1989). During the same period, the increases in the cost of insecticides and transport resulted in serious cuts in the operational capacity of programs, poor performance, and lowered morale.

²⁷¹ Basic errors such as lack of consideration of the country's annual 8 million increase in population were made by MEP in India. Siddiqi, *World Health and World Politics: The World Health Organization and the UN System*.

²⁷² Najera, "Malaria and the Work of WHO."

²⁷³ Nájera, González-Silva, and Alonso, "Some Lessons for the Future from the Global Malaria Eradication Programme (1955–1969)."

effectiveness. Their support can be harnessed by involving skills and expertise of the local NGOs. Analyzing the drawbacks and reasons for the drawbacks, this thesis arrives on the conclusion that MEP did not embrace the three elements of governance in its structure. The implementation of the program was seen at multiple levels of the society, but execution of the program lacked collective action. The venture lacked professionalism and focused on the end result rather than the process leading to the final objective. See table 7 for a comparative analysis of the successful and unsuccessful initiatives discussed in this chapter.

Table 7. Comparative review of the attributes of the four initiatives

TDR and MDP	MEP and "3 by 5" initiative
1. Based on public-private partnerships at the international, national, and local levels (involvement of pharmaceutical industry, World Bank, WHO, Ministries of Health, local communities, and non-governmental organizations)	Lack of solid partnerships among governments, private sectors, and NGOs
2. Comprised of concrete goals and objectives (congruency of mission, strategy, and values among all partners)	2. Incoherent planning coupled with disorganized and erratic functioning
3. WHO not the sole authority or the only representative of the initiative	3. WHO was the authority and leader of the initiatives
Long term commitment from the stakeholders	4. Lack of commitment from stakeholders
Community-based mass treatment programs harnessing skills and expertise of local NGOs	Top-down strategies with lack of NGO and community participation
6. Sustained financial contribution from the partners (direct costs to the organizations have been minimal)	6. Funded by UN agencies and withdrawal of funding and resources from the agencies when no progress was noted

Lessons learned from the MEP and the "3 by 5" initiative highlight the fact that no single strategy or government administration procedures can be applicable everywhere. No venture should be rushed head-long into without considerable planning. The WHO entails long-term commitment with a flexible strategy exhibiting community involvement, integration of health systems, partnerships, and the development of agile surveillance systems. Ensuring global access to advances in science and health technology, development and distribution of lifesaving drugs, requires effective leadership and public-private partnerships. Partnerships with the private sector have demonstrated an ability to advance public health messages and create incentives for the industry to develop healthier products. The WHO's major task is to combat illness—especially key infectious diseases that ravage the world's poor—but a long-running dispute over the preferred approach has left the organization divided and ineffectual in many of its projects. Multi-member partnerships, which have recently become popular, reflect recognition that some problems require many partners and complex organizational mechanisms to address all the different aspects. Partnerships are developed as a property and the different aspects.

²⁷⁴ Siddiqi, World Health and World Politics: The World Health Organization and the UN System.

²⁷⁵ Lincoln C. Chen, Timothy G. Evans, and Margaret E. Wirth, "Philanthropy and Global Health Equity," in *Critical Issues in Global Health*, ed. Charles Everett Koop, Clarence E. Pearson, and Schwarz M. Roy (San Francisco, CA: Jossey-Bass, 2001). To develop quality products in health, links with laboratory research and companies must be established.

²⁷⁶ Buse and Waxman, "Public-Private Health Partnerships: a Strategy for WHO." The WHO should only enter into those partnerships that usually seek to achieve well-defined and specific health outcomes, such as those that are linked to disease or risk factors.

²⁷⁷ Reich, Austin, and Buse, *Public-Private Partnerships for Public Health*.

Chapter 5 - Conclusion

Globalization is generally understood to include two interrelated elements: the opening of borders to increasingly fast flows of goods, services, finance, people, and ideas across international borders; and the changes in institutional and policy regimes at the international and national levels that facilitate or promote such flows. ²⁷⁸ It is one of the major causes that have led to "organization explosion" and the resulting proliferation of associations and networks at every level of the community.²⁷⁹ Globalization has provoked shifting of boundaries, relocation of authorities, weakening of states, introduction of new players in bureaucratic decisions, and an upsurge of NGOs and private sector actors. ²⁸⁰ The evolution of species, antimicrobial resistance, and even the influence of media are all creating new health challenges, making the health risks evident. Health advances or setbacks in one part of the globe impact health worldwide. The tremendous interaction and interdependence between various players requires efficient networking coupled with cooperation and planning. The departure from traditional forms of authority encouraged the author of this thesis to focus on the processes of governance, rather than on governments as the entities exercising authority. The advent of new partnerships, new market systems, and new instruments offers promising solutions to the global health challenges.²⁸¹ The governance debate is complex; however, this thesis endorses the Acklesonian and Lapidian definition for governance that comprises a formal and informal coordination across multiple levels from the local to the global—among public agencies and private corporations seeking to accomplish common goals and resolve problems through partnerships and collective action.²⁸² Governance refers to a set of institutions and actors that are drawn from within and also beyond government. It recognizes that the capacity to "get things done" which does not rest solely on the power of government to command or use authority.²⁸³

Partnerships between public/governmental entities, private/commercial entities, and civil society contribute to improving health worldwide by combining different skills and resources of

²⁷⁸ World health Organization, "Globalization," WHO, available at http://www.who.int/trade/glossary/story043/en/index.html.

²⁷⁹ James N. Rosenau, *The Study of World Politics Volume 2: Globalization and Governance* (New York: Routlege, 2006). pg74-76

²⁸⁰ Ibid. pg 115-116.

²⁸¹ Chen, Evans, and Wirth, "Philanthropy and Global Health Equity." Pg432

²⁸² Jason Ackleson and Yosef Lapid, 2010.

²⁸³ G. Stoker, "Governance as Theory: Five Propositions," *International Social Science Journal* 50, no. 1 (1998).

various sectors in innovative ways. The number of such formalized public-private partnerships has increased dramatically in the recent history, from about 50 in the 1980s to more than 400 today, according to a survey reported by Kaul. 284,285 The public health sector is confronted by formidable challenges which need global collective solutions. All stakeholders need to recognize the objective of supporting and improving everyone's health. The WHO is an international organization formed for the purpose of fostering international cooperation in the health field. However, the organization has experienced a complex landscape of competing ideas, interests, and institutions. The foundation on which the organization's governance structure was established called for interaction at multiple levels of society to achieve its mandate of health for all. Their ambition, agenda, declarations, and programs have an international scope, but their implementation is national as the WHO acts in agreement with the national governments. ²⁸⁶ The WHO has established collaboration centers that participate on a contractual basis in cooperative programs supported by the organization at the national, international, regional, interregional, and global levels. The WHO has a long history of relations with NGOs (both officially and unofficially). The constitution mandates that the WHO may make suitable arrangements for consultation and cooperation with nongovernmental organizations (NGOs) in carrying out its international health work. During the 1960's and 70's its direction was more influenced by political events than it was by technical interventions. The financial deficit was immense and the organization was relying on voluntary contributions. The intensification of globalization in the 1990s renewed debates about the WHO's mandate in international health security and health cooperation. ²⁸⁷ Multilateral institutions such as the World Bank and IMF displaced the WHO as a major influence behind health policy in poor countries because of their greater funding power. Additionally, in the late 1980s and early 1990s, the WHO was accused of lack of direction and cohesion, reluctance to move beyond prevention of infectious diseases, and reluctance to become involved in the affairs of national governments.²⁸⁸ The appointment of Kofi Annan as the UN Secretary-General in 1997 was one of the major turning points that encouraged the shift from an

²⁸⁴ Inge. Kaul, "Exploring the Policy Space between Markets and States: Global Public-Private Partnerships" in *The New Public Finance: Responding to Global Challenges*, ed. I. Kaul and P. Conceição (New York: Oxford University Press, 2005).

²⁸⁵ Cooper, Kirton, and Schrecker, Governing Global Health: Challenge, Response, Innovation.

²⁸⁶ Beigbeder et al., The World Health Organization.

²⁸⁷ Godlee, "The World Health Organization: WHO in Crisis."

²⁸⁸ Abbasi, "The World Bank and World Health: Changing Sides."

anti-business approach to a pro-business approach within the UN and its agencies. Kofi Annan, with his business education, brought with him an understanding and appreciation for the private sector that none of his predecessors had displayed. It was a departure from the traditional diplomatic background of every UN Secretary-General.²⁸⁹ Thus, it is vital to address if the WHO has been able to establish a framework wherein member states, civil society, and private actors are able to embrace the new global health governance agenda. It is possible to distinguish and elucidate reasons for the transition in the WHO's governance structure to encompass the Acklesonian and Lapidian system into its operation.

Table 8. Reasons for transition in the WHO governance structure

Reasons for the transition:

Lack of resources

- Inadequate organizational resources to carry out basic mandates
- Poor management of funds
- Dwindling financial assistance from the member states

Inefficient leadership²⁹⁰

- Misplaced priorities (political gain over technical excellence)
- Widespread cronyism

Bureaucracy

- Disparate and uncoordinated structure; fragmented and decentralized power
- Internal strife

Reliance on national governments

- Inability to act independently of member states
- Lack of authority to directly intervene in member states' health programs

²⁸⁹ S. Tesner and G. Kell, *The United Nations and Business: a Partnership Recovered*, 1 ed. (New York: St. Martin's Press, 2000). Annan completed his undergraduate studies at Macalester College in St. Paul, Minnesota, United States, in 1961. Annan then did a DEA degree in International Relations at the Graduate Institute of International and Development Studies in Geneva, Switzerland, from 1961–62. After some years of work experience, he studied at the MIT Sloan School of Management (1971–72) in the Sloan Fellows program.

²⁹⁰ B. Bull, *Development Issues in Global Governance : Public-Private Partnerships and Market Multilateralism* (New York: Routledge, 2007).

Inability to keep up with other multilateral institutions and private foundations

- Inability to adopt a "hard business approach" to generate funding
- Excessive caution about forming partnerships with the private sector
- Inability to adapt to shifting governance structures; legally restricted by an outdated constitution

Underequipped to effectively combat/control new and reemerging diseases

- Inadequate resources to address HIV/AIDS, SARS, neglected tropical diseases, chronic diseases (e.g., cancer), and resurging diseases (e.g., TB and malaria)
- Lack of funding to conduct research for new drugs and vaccines
- Unwillingness to partner with private pharmaceutical industry

One of the major reasons for the transition was resource deficiency and financial strain on the WHO. The organization was ineffective in many cases because its organizational resources were inadequate to perform particular functions and efficiently solve problems. It forced the organization to take the route of multilateralism. Its working was too politicized and bureaucratic; despite the dedication of the many public health professionals employed, the WHO had a reputation of possessing a weak governance structure. The glacial pace at which the WHO's bureaucracy operated ranked among the most frequently expressed criticisms of the organization, especially by the donor organizations. The inability of the WHO to provide health as a GPG has forced the need to foster the governance arrangements. ²⁹¹ These considerations led to the evolution of a range of interface arrangements that brought together two kinds of organizations: those with the mandate to offer public good, and those that could bring about public good through the provision of resources, technical expertise or outreach.²⁹² The WHO has always been dependent upon national governments and private foundations for funding, and such dependence has often resulted in chaotic and political decision-making processes. The WHO resorted to forging alliances for R&D on drugs and vaccines for disease prevention. The worldwide HIV/AIDS epidemic strained health systems that were already overstretched. The turn of the millennium witnessed the proliferation of diseases like HIV, TB, infectious diseases,

²⁹¹ The term "governance arrangement" describes the structure of the interactions between various actors pursuing common goals.

292 Nishtar, "Public-Private 'Partnerships' in Health - a Global Call to Action."

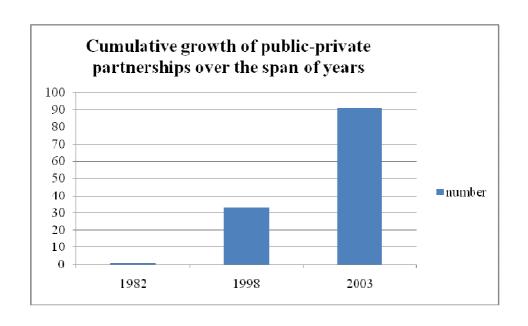
and other global health problems which resulted in a fundamentally new approach to tackling them through public-private partnerships. After a decade of what was widely deemed uninspired leadership, Director-General Brundtland began her appointment with an overhaul, bringing in an almost entirely new senior staff and refocusing the WHO's mission. In particular, she strengthened the WHO's partnerships with member countries, non-profit groups, and even private-sector businesses to increase the agency's effectiveness. The Civil Society Initiative (CSI) fosters relations between WHO and nongovernmental and civil society organizations and is responsible for the administration of formal relations as set out in the principles governing relations between WHO and nongovernmental organizations (NGOs).²⁹³ In more recent years, the nonprofit sectors have grown in scale and influence and are having profound impacts on health.²⁹⁴ In 2007 the total funding for global health was US\$22 billion, US\$7 billion of which was provided by PPPs and private foundations. The development of new partnership structures for public health is an important goal of the WHO. The global health sector now leads the race, with steady increases in health partnerships with each passing year. The number of public-private partnerships for health grew rapidly, from 1 in 1982 to 33 in 1998, and then about 91 in 2003. The WHO and The United Nations Children's Fund (UNICEF) have been the two organizations most involved in these initiatives, participating in 42 and 19 such institutions respectively. See figure 5 for details.²⁹⁵ PPPs and informal networks are being increasingly encouraged as part of the comprehensive development framework, in an efficient, effective and equitable manner because of lack of resources and management issues.²⁹⁶

²⁹³ World Health Assembly, "Principles Governing Relations with Nongovernmental Organizations."

²⁹⁴ World Health organization, "Strategic Alliances: The Role of Civil Society in Health," in *Civil Society Initiative* (Geneva: WHO, 2001).

²⁹⁵ Liliana B. and Andonova Goldfarb Center, "Globalization, Agency, and Institutional Innovation: The Rise of Public-Private Partnerships in Global Governance," (2006).

²⁹⁶ Nishtar, "Public-Private 'Partnerships' in Health - a Global Call to Action."



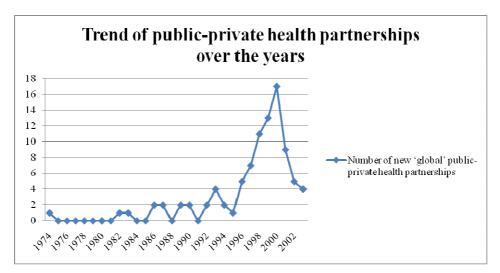


Figure 4. Trends in the number of public-private partnerships in health over time

Sources: B, Liliana, and Andonova Goldfarb Center. "Globalization, Agency, and Institutional Innovation: The Rise of Public-Private Partnerships in Global Governance." (2006). Nishtar, Sania. "Public-Private 'Partnerships' in Health - a Global Call to Action." *Health Research Policy and Systems* 2, no. 1 (2004): 5.

The fact that three of the UN's eight Millennium Development Goals (MDGs) are specific to health is evidence of the consensus on this point across the international development community.²⁹⁷ The eighth MDG calls for the "[development of] a global partnership," which includes the development of partnerships to make affordable, essential drugs available in developing countries.²⁹⁸ As offspring of the UN, the WHO endorses the MDGs. However, in order for the WHO to effectively accomplish these goals, it is critical that it apply the Acklesonian-Lapidian elements of governance to its working framework over a continuous period of time. Over the past two decades, the WHO has come to recognize that while member states continue to be vital and active participants at the core of public affairs, they are no longer the only stakeholders who initiate programs and dominate the arenas of health security. The WHO, as the only global health actor possessing both democratic and formal legal legitimacy, is best positioned to capitalize on this new situation in public health and respond with innovative approaches to governance, moving away from traditional forms of governance. Such a transformation is already underway and is needed to bring the increasingly chaotic network of activities and entities affecting health outcomes under the umbrella of a centralized standardsetting agency.²⁹⁹ In meeting the challenges of an aging population, infectious diseases, bioterrorism, and productive communities, the pharmaceutical industry is indispensable to the WHO. Leveraging partnerships and collaboration with the private sector to address the global health issues may not be easy. Dr. Margaret Chan, Director-General of the WHO (2006-present), in referring to the global health leadership, stated that, "the WHO can no longer aim to direct and coordinate all of the activities and policies in multiple sectors that influence public health today."300

The WHO participates in a number of global public-private partnerships. Merck's MDP, backed up by public and philanthropic sector provision of the necessary infrastructure to utilize this drug effectively for onchocerciasis control is a shining example of what can be achieved through positive cooperation among multiple stakeholders. Therefore, the different players stand

²⁹⁷ Samlee Plianbangchang, "Trade and Health: Perspectives and Issues," in *Compilation of Presentations made at* the Inter-regional Workshop (World Health Organization, South-East Asia Region).

²⁹⁸ United Nations, "Millennium Development Goals (MDGs)," accessed at http://www.un.org/millenniumgoals/. ²⁹⁹ I. Kickbusch, W. Hein, and G. Silberschmidt, "Addressing Global Health Governance Challenges through a New Mechanism: The Proposal for a Committee C of the World Health Assembly," Journal of Law Medicine & Ethics 38, no. 3 (2010). ³⁰⁰ Ibid.

an improved chance of delivering on their objectives if they can find better ways of collaborating. 301 While neither the public nor the private sector alone can eliminate health inequities, focused partnerships involving both sectors have the potential to contribute to their reduction. The WHO Special Program for Research and Training in Tropical Diseases (WHO/TDR) took over much of the burden in the 1990s, when it became clear that a new model was needed to stimulate the discovery and development of new medicines for tropical diseases. 302 The success of the MDP and TDR initiatives justifies the incorporation of the three elements of governance in an organizational structure. However, long-term, successful implementation of those elements is critical. In comparing programs like the MEP and the "3 by 5" initiative with the much more effective MDP, this thesis has arrived at the conclusion that it is essential to integrate administrative structure, as well as the patterns of operation for each national program, into the health and socio-cultural setting of the country. This will ensure better management of multiple levels of society. It is vital to acknowledge that public-private governance framework does not simply crop up where intergovernmental or state institutions have failed, as many arguments might imply. Instead, public-private institutions cluster in narrower areas of cooperation where the strategic interests of international organizations, states, and transnational actors intersect. 303

The WHO now has an opportunity to develop intellectual leadership in the 5 action areas: 304

- health as a global public good
- health as a key component of collective human security
- health as a key factor of global governance of interdependence
- health as responsible business practice and social responsibility
- health as global citizenship

³⁰¹ R. G. Ridley, "Putting the Partnership into Public-Private Partnerships," *Bull World Health Organ* 79, no. 8 (2001).

³⁰² Croft, "Public-Private Partnership: From There to Here."

³⁰³ B. and Andonova Goldfarb Center, "Globalization, Agency, and Institutional Innovation: The Rise of Public-Private Partnerships in Global Governance." Working Paper No. 2006-004.

³⁰⁴ Ilona Kickbusch, Wolfgang Hein, and Gaudenz Silberschmidt, "Addressing Global Health Governance Challenges through a New Mechanism: The Proposal for a Committee C of the World Health Assembly," *The Journal of Law, Medicine & Ethics* 38, no. 3 (2010). To adapt to the networked governance framework, the WHA already has a central position as a "superstructural node" in global health governance. It is now a unique meeting place of global health actors. This nodal structure brings together the representatives of all the sectors involved.

Health as a GPG can be addressed only when individual governments come together, through the WHO, to create transnational policy and action. Proactive and committed actions from the different players are needed to provide health as GPG. Although the WHO has undergone tremendous modifications in its governance structure over time, today, the governance principles have emerged in a more complex manner than when the WHO was the only global leader in health. Thus there is a need for more coherence and coordination in global health. The challenge for the WHO is to provide an interface—polylateral diplomacy venue—where different institutions and stakeholders in global health can interact with one another. This thesis reiterates the Acklesonian-Lapidian definition of governance, and it puts forth suggestions to incorporate the following strategic pathways for superior and effective functioning of the WHO. 306,307,308

1. Providing mechanisms and instruments:

The key task for the WHO in the current global health situation is identifying key stakeholders for each issue at hand, and developing effective partnerships among new global health actors, multilateral intergovernmental institutions, and relevant parties. Forging partnerships will help to promote cooperation among scientific professional groups, political groups, and civil society contributing to the advancement of health. Encouraging participation of non-state actors also relieves the WHO of some financial pressures. The WHO, through the new governance framework, brings financial stability, freedom, and advanced innovative solutions to solving problems that would be otherwise improbable through its lone efforts, offering a win-win situation for all the stakeholders involved.

٠,

³⁰⁵ Feachem, "The Role of Governments."

³⁰⁶ Kickbusch, Hein, and Silberschmidt, "Addressing Global Health Governance Challenges through a New Mechanism: The Proposal for a Committee C of the World Health Assembly." The new processes, flexible networks, partnerships, interfaces, and a multitude of information systems have created an environment of close governance for the WHO. The actors involved in the process mentioned above proactively associate with national as well as international state actors to form hybrid alliances. In the course of action, they play significant roles and make their presence felt in many different ways in international organizations like the WHO.

³⁰⁷ Lee, World Health Organization (WHO).

³⁰⁸ Koop, Pearson, and Schwarz, *Critical Issues in Global Health*.

2. Ensuring polylateral diplomacy: 309

It is important that the WHO provides an interface to conduct formal and informal meetings, where NGOs exert influence, the private sector lobbies, and agreements are eventually reached. The WHO needs to adapt to new decision-making procedures and create conditions for ordered rule and collective action. Such collective action helps to strengthen collaboration with all its member states and helps devise a broader strategy for reaching out to the world.

3. Engaging in new influential ways:

As health is a center point of geopolitics, security, trade, and foreign policy, the WHO needs to work closely with partner agencies and organizations to address social determinants of health and promote policy coherence in order to minimize health inequities and advocate these issues as top priorities for global development. It needs to come up with initiatives to confront major health threats such as population growth and the tobacco epidemic. There is a need for acceptance of health not only as an outcome of development, but also as a significant contribution to economic growth, health security, and social stability. The governance architecture should be multilayered, encompassing all levels of society (local, national, and international) in order to build community capacity and civic trust.

Governance structures comprised of the three elements of governance allows the problem-solving burden to be distributed among the stakeholders. Partnership between the WHO and the commercial sector is inevitable, but risks and benefits need to be reflected upon. A form of governance based on the Acklesonian-Lapidian defintion assists in accomplishing goals employing methods of shared decision-making and risk taking. It is important for the WHO to embrace the Acklesonian-Lapidian elements and grow from strength to strength by adhering to the strategies mentioned above. This will enable the WHO to act as a formal institution empowered to enforce compliance, and approve of informal arrangements that people or other institutions have agreed to or perceived to be in their interest. Incorporating these elements

³⁰⁹ There is considerable analysis done on the subject. However, polylateral diplomacy is a topic of future research For more information refer to J. Kurbalija and V. Katrandjiev, *Multistakeholder Diplomacy: Challenges and Opportunities* (DiploFoundation, 2006). Geoffrey Wiseman, "Polylateralism" and New Modes of Global Dialogue," in *Diplomacy Vol. Iii*, ed. Christer Jönsson and Richard Langhorne (London: Sage, 2004).

within the organization will enable organized collectives of people and the institution representatives to speak in unison with one voice.³¹⁰

To quote the philosopher Arthur Schopenhauer,

"Every truth passes through three stages before it is recognized. In the first, it is ridiculed, in the second it is opposed, and eventually is it regarded as self-evident."

In keeping with these words, the author of this thesis believes that the value of the Ackleson-Lapid definition for governance in health security will gradually become self-evident.

³¹⁰ Chen, Evans, and Wirth, "Philanthropy and Global Health Equity."

References

- "http://science.jrank.org/pages/4434/Monosodium-Glutamate-MSG.html">Monosodium Glutamate (MSG) Characteristics of MSG.
- Abbasi, K. "The World Bank and World Health: Changing Sides." *British Medical Journal* (Clinical research ed.) 318, no. 7187 (1999): 865.
- Ackleson, Jason, and Yosef Lapid. 2010.
- Aginam, O. "Health or Trade? A Critique of Contemporary Approaches to Global Health Diplomacy." *Asian Journal of WTO & International Health Law and Policy* 5, no. 2 (2010): 355-80.
- Aginam, Obijiofor. "International Law and Communicable Diseases." *Bulletin of the World Health Organization* 9 (2002): 946-51.
- Anne-Emanuelle Birn, Pillay Yogan, and Holtz Timothy. *Textbook of International Health: Global Health in a Dynamic World.* 3rd ed: Oxford University Press, 2009.
- Anonymous. "Public/Private Partnerships in Global Health: Lessons from the Experiences of Merck & Co.". Geneva: Commonwealth Secretariat, 2006.
- B., Liliana, and Andonova Goldfarb Center. "Globalization, Agency, and Institutional Innovation: The Rise of Public-Private Partnerships in Global Governance." (2006).
- Babai, Don. "The World Bank and the IMF: Backing the State Versus Rolling It Back." In *The Promise of Privatization: a Challenge for U.S. Policy*, edited by Raymond Vernon, 254-85. New York: Council on Foreign Relations, 1988.
- Bashford, Alison. *Imperial Hygiene: A Critical History of Colonialism, Nationalism and Public Health.* Houndmills and New York: Palgrave Macmillan, 2004.
- Bate, Roger. "WHO's AIDS Target an Inevitable Failure." *Health Policy Outlook*, no. 3 (2006):
- Beigbeder, Y, M Nashat, MA Orsini, JF Tiercy, Graduate Institute of International Studies, and Società italiana per l'organizzazione internazionale. *The World Health Organization*. Dordrecht, Netherlands: M. Nijhoff, 1998.
- Birn, A. E. "The Stages of International (Global) Health: Histories of Success or Successes of History?" *Global Public Health* 4, no. 1 (2009): 50.
- Birn, Anne-Emanuelle, Yogan Pillay, and Timothy Holtz. *Textbook of International Health: Global Health in a Dynamic World.* 3rd ed. New York: Oxford University Press, 2009.
- Birner, Regina. "Improving Governance to Eradicate Hunger and Poverty." In 2020 Focus Brief on the World's Poor and Hungry People. Washington D.C.: IFPRI, 2007.
- Boddewyn, J. J. "Understanding and Advancing the Concept of Nonmarket." *Business & society* 42, no. 3 (2003): 297.
- Boulle, A. "Scaling up Antiretroviral Therapy in Developing Countries: What Are the Benefits and Challenges?" *Postgraduate Medical Journal* 84, no. 991 (2008): 225.
- Brown, S. "Global Public-Private Partnerships for Pharmaceuticals: Operational and Normative Features, Challenges, and Prospects." *Canadian Public Administration Journal* (2008).
- Brown, Theodore M., Marcos Cueto, and Elizabeth Fee. "The World Health Organization and the Transition From "International" To "Global" Public Health." *American Journal of Public Health* 96, no. 1 (2006): 62-72.
- Bull, B, and Desmond McNeill. *Development Issues in Global Governance: Public-Private Partnerships and Market Multilateralism.* New York: Routledge, 2007.

- Bull, B. Development Issues in Global Governance: Public-Private Partnerships and Market Multilateralism. New York: Routledge, 2007.
- Buse, K., and G. Walt. "Global Public-Private Partnerships: Part I-A New Development in Health?" *Bulletin of the World Health Organization* 78, no. 4 (2000): 549-61.
- Buse, K., and G. Walt. "Global Public-Private Partnerships: Part II What Are the Health Issues for Global Governance?", 699-709: WHO, 2000.
- Buse, K., and A. Waxman. "Public-Private Health Partnerships: a Strategy for WHO." *Bulletin of the World Health Organization* 79, no. 8 (2001): 748-54.
- Buse, Kent, and Andrew M. Harmer. "Seven Habits of Highly Effective Global Public-Private Health Partnerships: Practice and Potential." *Social Science & Medicine* 64, no. 2 (2007): 259-71.
- Buse, Kent, Wolfgang Hein, and Nick Drager. *Making Sense of Global Health Governance: A Policy Perspective*. Hampshire, England: Palgrave Macmillan, 2009.
- Calman, K. "The 1848 Public Health Act and its Relevance to Improving Public Health in England Now." *British Medical Journal* 317, no. 7158 (1998): 596.
- Charles, J. "Origins, History, and Achievements of the World Health Organization." *British Medical Journal* 2, no. 5600 (1968): 293-96.
- Chen, Lincoln C., Timothy G. Evans, and Margaret E. Wirth. "Philanthropy and Global Health Equity." In *Critical Issues in Global Health*, edited by Charles Everett Koop, Clarence E. Pearson and Schwarz M. Roy, 431-39. San Francisco, CA: Jossey-Bass, 2001.
- Colatrella, B. "The Mectizan Donation Program: 20 Years of Successful Collaboration a Retrospective." *Annals of Tropical Medicine and Parasitology* 102, no. 1 (2008): S7-S11.
- Company, Houghton Mifflin. *The American Heritage College Dictionary*: Houghton Mifflin, 2004.
- Cooper, A.F., J.J. Kirton, and T. Schrecker. *Governing Global Health: Challenge, Response, Innovation*: Ashgate, 2007.
- Cooper, Andrew, and John Kirton. *Innovation in Global Health Governance: Critical Cases*. Burlington, VT: Ashgate Publishing Ltd, 2009.
- Croft, Simon L. "Public-Private Partnership: From There to Here." *Transactions of the Royal Society of Tropical Medicine and Hygiene* 99, no. Supplement 1 (2005): 9-14.
- Crosby, A.W. *The Columbian Exchange: Biological and Cultural Consequences of 1492*: Praeger, 2003.
- "Declaration of Alma-Ata." Paper presented at the International Conference on Primary Health Care, Alma-Ata, USSR, 1978.
- Dodgson, Richard, Kelley Lee, and Nick Drager. "Global Health Governance A Conceptual Review." In *Key Issues in Global Health Governance*. Geneva: World Health Organization and London School of Hygiene and Tropical medicine, 2002.
- Dollar, David. "Is Globalization Good for Your Health?" *Bulletin of the World Health Organization* 79 (2001): 827-33.
- Dr. Jason Ackleson. June 2010.
- Eilstrup-Sangiovanni, Mette. "Varieties of Cooperation: Government Networks in International Security." In *Networked Politics*, 194-227, 2009.
- Feachem, Richard G. A. "The Role of Governments." In *Critical Issues in Global Health*, edited by Charles Everett Koop, Clarence E. Pearson and M. Roy Schwarz, 385-98. San Francisco, CA: Jossey-Bass, 2001.
- Fidler, David P. "Vital Signs." The World Today, February 1 2009, 27-29.

- Fidler, David P., and Lawrence O. Gostin. "The New International Health Regulations: An Historic Development for International Law and Public Health." *Journal of Law, Medicine & Ethics* 34, no. 1 (2006): 85-94.
- Foege, WH. "Ten Years of Mectizan." *Annals of Tropical Medicine and Parasitology* 92, no. 1 (1998): 7-10.
- Friedman, T.L. The Lexus and the Olive Tree. New York: Farrar, Straus, Giroux, 2000.
- G. Shabbir Cheema, and UNDP. "UNDP and Governance: Experiences and Lessons Learned." New York: United Nations Development Programme, 2006.
- Gabel, M. *Global Inc: An Atlas of the Multinational Corporation*. New York: New York Press, 2003.
- Garett, Laurie. "The Challenge of Global Health." Foreign Affairs, 2007, 14-38.
- Gensini, Gian Franco, Magdi H. Yacoub, and Andrea A. Conti. "The Concept of Quarantine in History: From Plague to SARS." *Journal of Infection* 49, no. 4 (2004): 257-61.
- Given, LM. The Sage Encyclopedia of Qualitative Research Methods: Sage Publications, 2008.
- Global Health Council. "Understanding Private Actor Involvement in Health Systems." Washington D.C.: GHC, 2009.
- Global Health Europe. "Global Governance." available at http://www.globalhealtheurope.org.
- Global Health Watch. "Making WHO Work Better: An Advocacy Agenda for Civil Society." 4. London: Global Health Watch, 2006.
- Godlee, Fiona. "The World Health Organization: WHO in Crisis." *British Medical Journal* 309, no. 6966 (1994): 1424-28.
- Goodman, N. M. "International Health Organizations and Their Work." *Southern Medical Journal* 46, no. 7 (1953): 725.
- Goodman, Neville M. International Health Organizations and Their Work. London: Churchill, 1971.
- Gostin, L. O., and E. A. Mok. "Grand Challenges in Global Health Governance." *British Medical Bulletin* 90, no. 1 (2009): 7-18.
- Gostin, Lawrence O., and Emily A. Mok. "Grand Challenges in Global Health Governance." *British Medical Bulletin* 90, no. 1 (2009): 7-18.
- Hartl, Gregory. "Major Private Sector Partner, Merck, Welcomed to Lymphatic Filariasis Control Effort." WHO, available at http://www.who.int/inf-pr-1998/en/pr98-76.html.
- Hein, Wolfgang, and Lars Kohlmorgen. "Transnational Norm-Building in Global Health: The Important Role of Non-State Actors in Post-Westphalian Politics." In *Sixth Pan-European Conference on International Relations*. Turin: GIGA, 2007.
- Held, David, and Anthony McGrew. *Governing Globalization: Power, Authority, and Global Governance*. Cambridge: Blackwell Publishing Company, 2002.
- Hippocrates. "Air, Waters, and Places." In Encyclopedia Britannica, 2011.
- Horowitz, Leonard G. "Case Study in the Public Health Menace of Tuberculosis (TB) Testing." *Medical Veritas* 4 (2007): 1505–09.
- Howard-Jones, Norman. *International Public Health between the Two World Wars: The Organizational Problems*. Vol. 32. Geneva: World Health Organization, 1978.
- ——. "The Scientific Background of the International Sanitary Conferences 1851–1938." *WHO publications* (1975).
- Huber, Valeska. "The Unification of the Globe by Disease? The International Sanitary Conferences on Cholera, 1851-1894." *The Historical Journal* 49, no. 2 (2006): 453-76.

- -. "The Unification of the Globe by Disease? The International Sanitary Conferences on Cholera, 1851–1894." The Historical Journal 49, no. 2 (2006): 453-76.
- IMF. "The Role of the **IMF** in Governance Issues: Guidance Note." http://www.imf.org/external/pubs/ft/exrp/govern/govindex.htm.
- Institute of Governance, Ottawa. "Our Approach." http://iog.ca/en/about-us/our-approach. International Monetary Fund-public affairs. "The IMF's Approach to Promoting Good Governance and Combating Corruption Guide." http://www.imf.org/external/np/gov/guide/eng/index.htm.
- Kaul, Inge. "Exploring the Policy Space between Markets and States: Global Public-Private Partnerships " In The New Public Finance: Responding to Global Challenges, edited by I. Kaul and P. Conceição, 91-134. New York: Oxford University Press, 2005.
- Kickbusch, I., W. Hein, and G. Silberschmidt. "Addressing Global Health Governance Challenges through a New Mechanism: The Proposal for a Committee C of the World Health Assembly." Journal of Law Medicine & Ethics 38, no. 3 (2010): 550-63.
- Kickbusch, Ilona, Wolfgang Hein, and Gaudenz Silberschmidt. "Addressing Global Health Governance Challenges through a New Mechanism: The Proposal for a Committee C of the World Health Assembly." The Journal of Law, Medicine & Ethics 38, no. 3 (2010): 550.
- Kickbusch, Ilona, and Jonathan Quick. "Partnerships for Health in the 21st Century." World Health Statistics Quarterly 68 (1998).
- Klaus Dingwerth and Philipp Pattberg. "Global Governance as a Perspective on World Politics." Global Governance 12 (2006): 185-203.
- Koivusalo, M. The Shaping of Global Health Policy. Edited by L. Panitch and C. Leys, Socialist Register 2010. Morbid Symptoms: Health under Capitalism. London UK: The Merlin Press, 2009.
- Koop, C.E., C.E. Pearson, and M.R. Schwarz. Critical Issues in Global Health. San Francisco, CA: Jossey-Bass, 2001.
- Kurbalija, J., and V. Katrandjiev. Multistakeholder Diplomacy: Challenges and Opportunities: DiploFoundation, 2006.
- L, Frost, and Reich M. "Mectizan Donation Program: Origins, Experiences, and Relationships with Co-Ordinating Bodies for Onchocerciasis Control." Boston: Harvard School of Public Health, 1998.
- Lawrence O. Gostin and Emily A. Mok. "Grand Challenges in Global Health Governance." British Medical Bulletin 90, no. 1 (2009): 7-18.
- League of Nations Library at Geneva. League of Nations 1920-1946: Organization of Accomplishments: A Retrospective of the First International Organization for the Establishment of World Peace. New York and Geneva: United Nations, 1996.
- Lee, K. "For Debate. The Impact of Globalization on Public Health: Implications for the UK Faculty of Public Health Medicine." Journal of Public Health 22, no. 3 (2000): 253.
- Lee, Kelley. World Health Organization (WHO). New York: Routledge, 2009.
- Lee, Kelley, Kent Buse, and Suzanne Fustukian. Health Policy in a Globalising World. Cambridge: Cambridge University Press, 2002.
- Lee, Kelley, and Anne Mills. "Strengthening Governance for Global Health Research: The Countries That Most Need Health Research Should Decide What Should Be Funded." British Medical Journal 321, no. 7264 (2000): 775-76.

- Lincoln Chen, Jennifer Leaning, and Vasant Narasimhan. *Global Health Challenges for Human Security* Cambridge: Harvard University Press, 2003.
- Litsios, S., and World Health Organization. *The Third Ten Years of the World Health Organization*, 1968-1977: World Health Organization, 2008.
- Lohmann, L. "Whose Common Future?" Ecologist 20, no. 3 (1990): 82.
- Lucas, Adetokunbo. "Public-Private Partnerships: Illustrative Examples." In *Public-Private Partnerships in Public Health*. Massachusetts, USA: UNDP/World Bank/TDR/WHO, 2000.
- Lucas, Adetokunbo O. "Public-Private Partnerships: Illustrative Examples." In *Public-Private Partnerships for Public Health: Harvard Series on Population and International Health*, edited by Michael Reich, James E. Austin and Kent Buse. Cambridge: Harvard University Press, 2002.
- Mata, L. J. *The Children of Santa Maria Cauque: a Prospective Field Study of Health and Growth.* Edited by Costa Rica University Institute of Health Research: MIT press, 1978.
- Mectizan Donation Program. "Alleviating the Suffering Caused by River Blindness and Lymphatic Filariasis (Elephantiasis) "PDCI, available at www.mectizan.org.
- ——. "Partners." MDP, available at http://www.mectizan.org/nongovernmental-development-organization-ngdo-partners.
- Murray, C. J. L. "A Framework for Assessing the Performance of Health Systems." *Bulletin of the World Health Organization* 78, no. 6 (2000): 717.
- Naimoli, J. F. "Global Health Partnerships in Practice: Taking Stock of the Gavi Alliance's New Investment in Health Systems Strengthening." *International Journal of Health Planning and Management* 24, no. 1 (2009): 3-25.
- Najera, J. A. "Malaria and the Work of WHO." *Bulletin of the World Health Organization* 67, no. 3 (1989): 229-43.
- Nájera, José A., Matiana González-Silva, and Pedro L. Alonso. "Some Lessons for the Future from the Global Malaria Eradication Programme (1955–1969)." *PLoS Med* 8, no. 1 (2011): e1000412.
- Nishtar, Sania. "Public-Private 'Partnerships' in Health a Global Call to Action." *Health Research Policy and Systems* 2, no. 1 (2004): 5.
- Novotny, Thomas E. "Global Governance and Public Health Security in the 21st Century." *California Western International Law Journal* 38, no. 19 (2007): 19-39.
- Obijiofor, Aginam. Global Health Governance: International Law and Public Health in a Divided World. Toronto: University of Toronto Press, 2005.
- Ollila, Eeva, Globalism and Social Policy Programme (GASPP), and STAKES. "Global Health-Related Public-Private Partnerships and the United Nations." edited by Ministry of Foreign Affairs, 8. Helsinki: Finnish Ministry of Foreign Affairs, 2003.
- Organisation for Economic Co-operation and Development. Development Assistance Committee (OECD). *Participatory Development and Good Governance*. Paris: OECD, 1995.
- Pang, Tikki, and Emmanuel G. Guindon. "Globalization and Risks to Health." *EMBO reports* 5, no. S1 (2004): S11-S16.
- Peter Lydyard, Michael Cole, John Holton, Will Irving, Nino Porakishvili, Pradhib Venkatesan, and Kate Ward. *Case Studies in Infectious Disease*: Garland Science, 2009.
- Peters, D. H., and T. Phillips. "Mectizan Donation Program: Evaluation of a Public–Private Partnership." *Tropical Medicine & International Health* 9, no. 4 (2004): A4-A15.

- Plianbangchang, Samlee. "Trade and Health: Perspectives and Issues." In *Compilation of Presentations made at the Inter-regional Workshop*: World Health Organization, South-East Asia Region.
- Prasad, Shambu, Laxmi T, and Wani SP. "Institutional Learning and Change A Case Study of the Tata-Icrisat Project." Andhra Pradesh, India: Institutional Learning and Change (ILAC) Initiative., 2006.
- Reich, M.R. . "Public-Private Health Partnerships for Public Health." *Nature Medicine* 6, no. 6 (2000): 617-20.
- Reich, Michael, James E Austin, and Kent Buse. *Public-Private Partnerships for Public Health*. Edited by Michael Reich, Harvard Series on Population and International Health: Harvard University Press, 2002.
- Reinicke, W. H., and J. M. Witte. *Interdependence, Globalisation and Sovereignty: The Role of Non-Binding International Legal Accords*: Oxford University Press, 1999.
- Reza, J. N. "Innovation for Health: Research That Makes a Difference " In *TDR Annual Report* 2009, 76. Geneva Switzerland: World Health Organization, 2009.
- ——. *Innovation for Health: Research That Makes a Difference* TDR Annual Report 2009. Geneva Switzerland: World Health Organization, 2010.
- Richard Dodgson, Kelley Lee, Nick Drager. "Global Health Governance A Conceptual Review." In *Key Issues in Global Health Governance*. Geneva: World Health Organization and London School of Hygiene and Tropical medicine, 2002.
- Richardson, William C., and John P. Allegrante. "Shaping the Future of Health through Global Partnerships." In *Critical Issues in Global Health*, edited by Charles Everett Koop, Clarence E. Pearson and Schwarz M. Roy. San Francisco, CA: Jossey-Bass, 2001.
- Richter, J. "Public-Private Partnerships for Health: A Trend with No Alternatives?" *Development* 47, no. 2 (2004): 43.
- Ridley, R. G. "Putting the Partnership into Public-Private Partnerships." *Bull World Health Organ* 79, no. 8 (2001): 694.
- Ridley, R. G., and E. R. Fletcher. "Making a Difference: 30 Years of TDR." *Nature Reviews Microbiology* 6, no. 5 (2008): 401-07.
- Rodier, G. "Global Public Health Security." *Emerging Infectious Diseases* 13, no. 10 (2007): 1447.
- Rosenau, James N. "Governance in the Twenty-First Century." In *The Study of World Politics Volume 2: Globalization and Governance*: Routlege, 2006.
- -----. "Governance in the Twenty-First Century." *Global Governance* 1, no. 1 (1995): 13.
- ——. The Study of World Politics Volume 2: Globalization and Governance. New York: Routlege, 2006.
- ——. "Toward an Ontology for Global Governance." In *Approaches to Global Governance Theory*, edited by Martin Hewson and Timothy J. Sinclair, 1-21. Albany, NY: SUNY press, 1999.
- Saadé, Camille. "Leveraging NGO Partnerships to Scale POU Interventions " In *Global Health Council Annual Conference: Goals and Metrics*. Washington D.C.: Global Health Council, 2010.
- Saadé, Camille, and Christian Winger. "Point-of-Use Water Disinfection and Zinc Treatment Project (Pouzn)." Academy for Educational Development (AED), http://pshi.aed.org/projects_pouzn.htm.

- Sadrizadeh, Bijan, World Health Organization, and Special Programme for Research and Training in Tropical Diseases. *Making a Difference 30 Years of Research and Capacity Building in Tropical Diseases*. London: WHO, 2007.
- Scott, A., C. Zepeda, L. Garber, J. Smith, D. Swayne, A. Rhorer, J. Kellar, A. Shimshony, H. Batho, V. Caporale, and A. Giovannini. "The Concept of Compartmentalisation." *Rev. sci. tech. Off. int. Epiz.* 25, no. 3 (2006): 873-79.
- Shaffer, Ellen R., Howard Waitzkin, Joseph Brenner, and Rebeca Jasso-Aguilar. "Global Trade and Public Health." *American Journal of Public Health* 95, no. 1 (2005): 23-34.
- Siddiqi, J. World Health and World Politics: The World Health Organization and the UN System: University of South Carolina Press, 1995.
- Siddiqi, S., T. I. Masud, S. Nishtar, D. H. Peters, B. Sabri, K. M. Bile, and M. A. Jama. "Framework for Assessing Governance of the Health System in Developing Countries: Gateway to Good Governance." *Health Policy* 90, no. 1 (2009): 13-25.
- Siddiqi, Sameen Masud, Tayyeb I. Nishtar, Sania Peters, David H. Sabri, Belgacem Bile, Khalif M. Jama, and Mohamed A. "Framework for Assessing Governance of the Health System in Developing Countries: Gateway to Good Governance." *Health Policy* 90, no. 1: 13-25.
- Sin, C. H. "The Role of Intermediaries in Getting Evidence into Policy and Practice: Some Useful Lessons from Examining Consultancyclient Relationships." *Evidence & policy* 4, no. 1 (2008): 85.
- Sinclair, T.J. Global Governance: Critical Concepts in Political Science. New York: Routledge, 2004.
- Sitthi-amorn, Chitr, Ratana Somrongthong, John C Reeder, and Jonathon Simon. "/ Strengthening Health Research Capacity in Developing Countries: a Critical Element for Achieving Health Equity / Commentary: Health Research and Human Development in Papua New Guinea / Commentary: Does Strengthening Research Capacity Improve Health Equity?" *British Medical Journal* 321, no. 7264 (2000): 813.
- Smith, R.D. . "Foreign Direct Investment and Trade in Health Services: a Review of the Literature." *Social Science and Medicine* 59 (2004): 2313–23.
- Staples, Amy L. S. The Birth of Development: How the World Bank, Food and Agriculture Organization, and World Health Organization Changed the World, 1945-1965 Kent, Ohio: Kent State University Press, 2006.
- Stoker, G. "Governance as Theory: Five Propositions." *International Social Science Journal* 50, no. 1 (1998): 17-+.
- Sturchio, Jeffrey L., and Brenda D. Colatrella. Successful Public-Private Partnerships in Global Health: Lessons from the Mectizan Donation Program. Edited by B. Granville, The Economics of Essential Medicines. London: Royal Institute of International Affairs, 2002.
- Tarantola, Daniel. "Global Health and National Governance." *American Journal of Public Health* 95, no. 1 (2005): 8.
- Tennyson, Ros. *The Brokering Guidebook Navigating Effective Sustainable Development Partnerships*: The Partnering Initiative, 2005.
- Tesner, S., and G. Kell. *The United Nations and Business: a Partnership Recovered.* 1 ed. New York: St. Martin's Press, 2000.
- The Global Fund to Fight AIDS Tuberculosis and Malaria. "A New Partnership." The Global Fund, http://www.theglobalfund.org/en/partnership/?lang=en.

- Thomas, C., and M. Weber. "The Politics of Global Health Governance: Whatever Happened To "Health for All by the Year 2000"?" *Global Governance* 10, no. 2 (2004): 187-205.
- Trochim, William M.K. "Philosophy of Research Deduction and Induction." In *Research Methods Knowledge Base*: Atomic Dog Publishing, 2006.
- UNDP. Governance for Sustainable Human Development. New York,: UNDP, 1997.
- UNDP, World Bank, and WHO. "TDR Strategy (2000-2005)." In *Special Programme for Research & Training in Tropical Diseases (TDR)*, 25. Geneva: WHO, 2000.
- UNESCAP. "What is Good Governance?" available at http://www.unescap.org/pdd/prs/ProjectActivities/Ongoing/gg/governance.asp.
- UNFIP (United Nations Fund for International Partnerships). "UNFIP Projects." available at http://www.un.org/unfip/2004Website/charts.htm.
- United Nations. "Millennium Development Goals (MDGs)." accessed at http://www.un.org/millenniumgoals/.
- USAID. "Office of Democracy & Governance: Governance." USAID, http://www.usaid.gov/our_work/democracy_and_governance/technical_areas/dg_office/g_ov.html.
- Vijayan, Srimathy. "A World Health Organization Primer." *Medscape General Medicine* 9, no. 4 (2007): 41.
- Wallis, Patrick. "SARS, Governance and the Globalization of Disease." *Social History of Medicine* 18, no. 3 (2005): 496-98.
- Weiss, Thomas G. "Governance, Good Governance and Global Governance: Conceptual and Actual Challenges." *Third World Quarterly* 21, no. 5 (2000): 795-814.
- WHO. "About the 3 by 5 Initiative." available at http://www.who.int/3by5/about/en/.
- ——. "Archives of the Office International D'hygiène Publique (OIHP)."
- . "The First Ten Years of the World Health Organization." 538. Geneva: World Health Organization, 1958.
- ——. The First Ten Years of the World Health Organization. Geneva: World Health Organization, 1958.
- ——. "International Health Regulations." edited by World Health Organization. Geneva, 2005.
- ——. "International Health Regulations (IHR)." edited by World Health Organization, 74. Geneva: WHO, 2005.
- ——. "International Sanitary Conferences." In *The First Ten Years of the World Health Organization*. Geneva, 1958.
- WHO Media centre. "World Health Assembly." WHO, available at http://www.who.int/mediacentre/events/governance/wha/en/index.html.
- Widdus, R. "Public-Private Partnerships for Health Require Thoughtful Evaluation." *Bulletin of the World Health Organization* 81, no. 4 (2003): 235.
- ——. "Public-Private Partnerships for Health: Their Main Targets, Their Diversity, and Their Future Directions." *Bulletin of the World Health Organization* 79, no. 8 (2001): 713-20.
- Winslow, C. E. A. "The Untilled Fields of Public Health." Science 51, no. 1306 (1920): 23.
- Wiseman, Geoffrey. "Polylateralism" and New Modes of Global Dialogue." In *Diplomacy Vol. Iii*, edited by Christer Jönsson and Richard Langhorne, 36-57. London: Sage, 2004.
- World Bank. Governance: The World Bank's Experience. Washington D.C.: The World Bank, 1994.

- World Health Assembly. "Constitution of the World Health Organization." edited by WHO. Geneva 2006.
- ——. "Health Development in a Changing World a Call for Action." Geneva: World Health Organization, 1993.
- ——. "Principles Governing Relations with Nongovernmental Organizations." In *Civil Society Initiative (CSI)*, 74-79. Geneva: World Health Organization, 2001.
- World Health Organization. "About WHO." WHO, available at http://www.who.int/about/en/.
- ——. "Anniversary of Smallpox Eradication." WHO, available at http://www.who.int/mediacentre/multimedia/podcasts/2010/smallpox_20100618/en/.
- -----. "Basic Documents." Geneva: WHO, 1983.
- ——. "Constitution of the World Health Organization." New York: United Nations, 1946.
- ——. "Global Health Initiatives." WHO, available at http://www.who.int/trade/glossary/story040/en/index.html.
- World health Organization. "Globalization." WHO, available at http://www.who.int/trade/glossary/story043/en/index.html.
- World Health Organization. "Progress on Global Access to HIV Antiretroviral Therapy: An Update On "3 by 5"." Geneva: WHO, UNAIDS, 2005.
- ——. "Public-Private Partnerships for Health." WHO, available at http://www.who.int/trade/glossary/story077/en/.
- ——. "A Safer Future: Global Public Health Security in the 21st Century." In *The World Health Report 2007*. Geneva: WHO, 2007.
- ——. "Spending on Health: A Global Overview." WHO, available at http://www.who.int/mediacentre/factsheets/fs319/en/.
- World Health organization. "Strategic Alliances: The Role of Civil Society in Health." In *Civil Society Initiative*. Geneva: WHO, 2001.
- World Health Organization. "TDR, a Special Programme for Research and Training in Tropical Diseases." WHO, available at http://apps.who.int/tdr/svc/about.
- ——. "WHO Framework Convention on Tobacco Control." WHO, available at http://www.who.int/fctc/about/en/.
- World Heath Organization. *The Second Ten Years of the World Health Organization*, 1958-1967. Geneva: WHO, 1968.
- Yach, D., and D. Bettcher. "The Globalization of Public Health I: Threats and Opportunities." *American Journal of Public Health* 88, no. 5 (1998): 735–44.
- Yale Avalon Project, and Yale Law School. "Covenant of the League of Nations." Lillian Goldman Law Library, available at http://avalon.law.yale.edu/20th_century/leagcov.asp.
- ——. "Treaty of Westphalia: Peace Treaty between the Holy Roman Emperor and the King of France and Their Respective Allies." Lillian Goldman Law Library, available at http://avalon.law.yale.edu/17th century/westphal.asp.
- Yamey, G. "WHO's Management: Struggling to Transform a Fossilised Bureaucracy." *British Medical Journal* 325, no. 7373 (2002): 1170.
- Yotov, I. *The Quarters Theory: The Revolutionary New Foreign Currencies Trading Method.* Hoboken, NJ: John Wiley & Sons, 2009.